



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

FASTMOVER FID

by

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September 2005

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FASTMOVER FID

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ABSTRACT

This thesis addresses the issue of the addition of fixed-wing attack roles to the repertoire of skills taught by the aviation foreign internal (FID) defense community. FID is the mechanism by which the US government instructs foreign nations in skill sets America considers important that target nation's posses. The US's only aviation FID unit (6 SOS) currently only offers helicopter and transport related skills sets. This study probes whether FID and aviation FID "make sense" as a tactic, using national documents and leading academic perspectives as a benchmark. Concluding that they do, it goes on to consider the utility of attack missions as a possible expansion of tactics. Ultimately this thesis suggests that inclusion of fixed-wing attack aviation missions into the FID community is of particular utility in a post 9/11 world. The results also caution that the unique attributes of this mission require a special mindset and equipment that may not be congruous with traditional Air Force thinking/values, and that the path to implementation will require extreme diligence, patience, and care to prosecute.

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GLOSSARY

A/A – Air to Air
AA-FID – Attack Aviation Foreign Internal Defense
ABCCC – Air Borne Command Control Communications
AFAC – Airborne Forward Air Controller
AFDD – Air Force Doctrine Document
A-FID – Aviation Foreign Internal Defense
A/G – Air to Ground
AOR – Area of Responsibility
AP – Air Power
CA – Civil Affairs
CAS – Close Air Support
CEP – Circular Error Probable
CIA – Central Intelligence Agency
COIN – Counter Insurgency (or Insurgent)
CT – Counter Terrorism
DoD – Department of Defense
Exfil – Exfiltration
FAC – Forward Air Controller
FID – Foreign Internal Defense
FLIR – Forward Looking Infrared
FM – Fast Mover
FMS – Foreign Military Sales
GWOT – Global War on Terror
HN – Host Nation
IAD – Integrated Air Defense
Int - Interdiction
IDAD – Internal Defense and Development
Infil – Infiltration
Kts – Nautical Miles Per Hour (6076'/hr)

LIC – Low Intensity Conflict
LZ – Landing Zone
MANPAD – Man Portable Air Defense
MEDEVAC – Medical Evacuation
METL – Mission Essential Task Listing
NSHS – National Strategy for Homeland Security
MOOTW – Military Operations Other Than War
9/11 – September 11th, 2001
NSS – National Security Strategy
NVG – Night Vision Goggles
LIC – Low Intensity Conflict
LTTE - Liberation Tigers of Tamil Eelam
NSCT – National Strategy for Combating Terrorism
NSS – National Security Strategy
O&M – Operations and Maintenance
PI – Philippine Islands
POLMIL – Political Military
POL – Petroleum, Oil, Lubricants
SA – Security Assistance
SAM – Surface to Air Missile
SOCOM – Special Operations Command
SOF – Special Operations Force(s)
SOS – Special Operations Squadron
UAV – Unmanned Aerial Vehicle
USAF – United States Air Force
USMC – United States Marine Corp
USSOCOM – United States Special Operations Command
WWII – World War II

I. INTRODUCTION

One of the most important roles that the U.S. forces can play in the fight against terrorist groups is to train, advise, and assist the forces of other nations in counterinsurgency and counterterrorist operations. The forces of many battleground countries today lack the tools, the training, and in some cases, the motivation to conduct effective operations against terrorist groups that are often elusive, well armed, and highly committed to their cause. With time and sustained effort, U.S. military training missions can make a real difference.

*David Ochmanek*¹

A. FID IN THE PHILIPPINES

In the fall of 2003, the 6th Special Operations Squadron (SOS) of the United States Air Force, deployed to the Philippines as part of a security assistance action. Over the next several weeks the members of this unit instructed Philippine army UH-1H helicopter pilots in the tactical use of Night Vision Goggles (NVGs), including how to conduct an infiltration/exfiltration (infil/exfil) into a remote, un-illuminated landing zone (LZ).²

Several weeks later, Philippine army ground forces conducted a night raid against a suspected terrorist site, whence the team was ambushed and sustained four casualties. The team called for a medical evacuation (MEDEVAC) and all four injured team members were extracted from the “hot”, dark, unprepared, LZ by pilots trained by the 6 SOS. Although one individual did succumb to his injuries while enroute back to the base, none of these individuals would have survived without the newly acquired equipment, skills and training provided by US personnel.³

Shortly thereafter, a public tip-off alerted Philippine forces to the whereabouts of al-Qaeda-linked, Abu Sayyaf’s top leader Galib Andang,

¹ David Ochmanek. “Military Operations Against Terror Groups Abroad: Implications for the United States Air Force”. Santa Monica: Rand. 2003. p. 245.

² Major Brian Downs. 6 SOS, Personal interview, 26 January 2005.

³ Major Brian Downs. 6 SOS, Personal interview, 26 January 2005.

popularly known as “Commander Robot”. Abu Sayyaf under the leadership of Andang had been feared for their kidnapping sprees and bomb attacks against foreigners carried out in the southern Philippines for more than a decade, often beheading their victims if their ransom demands are not met. This time-sensitive information related Commander Robot’s location as in a remote and difficult to rapidly access location, thus the same team that had been trained by the 6 SOS and had conducted the MEDEVAC, was scrambled to perform the tactical infiltration of an assault team. The Philippine team was successful inserted, and a major fire-fight ensued. Andang initially escaped the battle, although severely wounded, but was captured in a neighboring town shortly thereafter. Armed Forces Chief General Narciso Abaya said a severe blow had been dealt the terrorist organization and the loss of their top leader would “intensify their hunt for the remaining Abu Sayyaf leaders”. A military spokesman also voiced optimism that the capture would reveal links to the broader terrorist group, Jemaah Islamiyah.⁴

B. WHAT IS FID?

The previous two examples illustrate the powerful utility of Foreign Internal Defense (FID). FID is defined by Joint Publication 1-02, *A Dictionary of Military Terms*, as “participation by civilian and military agencies of a government in any of the action programs taken by another government or other designated organization to free and protect its society from subversion, lawlessness and insurgency.”⁵ More informally worded, FID is the mechanism by which the U.S. government uses diplomatic, economic, informational and military instruments to aid its allies in the security of their own nation. The genesis behind this strategy is that FID is a cost, time, and force multiplier given the breadth and depth of threats the United States faces in this world.

One of the specific applications of U.S. military FID programs is via aviation assets, or Aviation FID (A-FID). Although the historical use of aircraft for

⁴ “Commander Robot’s capture big blow to Abu Sayyaf”. Sun Star Network Online, 8 December 2003.

⁵ United States. Department of Defense. Dictionary of Military and Associated Terms, Joint Publication 1-02. 12 Apr 2001, amended 9 May 2005. p. 212.

Internal Defense and Development (IDAD)⁶ type roles extends back into the WWII era through early Vietnam, those applications of airpower ended shortly thereafter. In the twenty years that followed, air power theorists pondered the fate of FID, and some speculated that the “international perception that the U.S. can and will act militarily in a whole range of ways, from assisting friends to actual intervention to defend an important but not vital interest, is one this country may want to foster in the years ahead.”⁷

A-FID was resurrected in 1994 as the 6th Special Operations Squadron, at Hurlburt Field, Florida. The 6th is the only A-FID organization in the U.S. military and was created to advise, train, and assist foreign aviation forces in the application of airpower. In that role, 6th members organize as Combat Aviation Advisors (CAA), and teach a broad spectrum of aviation related skills sets, including piloting, navigation, maintenance, airbase defense, logistics and intelligence, across the globe. 6 SOS personnel are specifically trained to be culturally, linguistically, and professionally oriented towards the regions in which they operate. All 6 SOS personnel are accomplished professionals in their respective specialty and are hand selected solely from volunteers for inclusion in the unique A-FID mission.⁸

The A-FID process is primarily aimed at the transmission of tactics, techniques and procedures to the host nation’s air forces. Although there are mechanisms to provide equipment to our allies, and FID trained organizations work closely with those transmission avenues, FID personnel focus on how best the host nation should use what assets they have available to them. As such, A-

⁶ IDAD are the host nation’s goals that FID aims to support.

⁷ David J. Dean. “The Air Force Role in Low-Intensity Conflict”. Air University Press: Alabama, 1986. p. 7.

⁸ The 6th Special Operations Squadron will be referenced many times throughout this discussion. It is desirable that this author convey that the 6 SOS appears on face value to be a relatively unbiased representative in this matter. In dealings with that organization, a wide spectrum of beliefs and opinions were voiced as to the merits of adding aviation attack assets to their mission. Some aggressively oppose, others aggressively support, while most seem viscerally aware of the possible benefits and also the potential costs. Where 6 SOS opinions are included in this writing, the author attempts to portrait all sides of the argument as seen from their eyes, but believes in the end that the breadth of their view makes them a valuably unbiased reference source.

FID personnel are not experts in every aircraft in the world inventory, but have found that a basal level of knowledge in the target airframe is enough to ensure a safe operating environment, and thence begin the process of instruction.

C. THESIS

In the first ten years of its existence the 6 SOS has grown significantly, and steadily increased the number and type of aviation roles performed by light/medium/heavy-lift helicopters and fixed-wing transport aircraft. But due to a number of issues to be discussed herein, no real expansion into “offensive capabilities” has occurred. This paper proposes a three-fold approach towards addressing the question of, should the United States aviation Foreign Internal Defense community acquire the capability to “advise, train and assist” foreign nations in the conduct of offensive related combat aviation skills? In particular, in this study emphasis is placed on roles and missions performed by light/fast, fixed-wing aircraft employing fixed-forward-firing ordinance and free-fall air-to-ground munitions.⁹ Although much of the context of this discussion will be relevant to helicopters and/or gunships performing similar missions, the focus is on a Vietnam-era representative asset performing a classic Close Air Support (CAS) type application of airpower.¹⁰

⁹ The terms “fixed-wing” and “rotary-wing” are used to differentiate between the more general terms “airplane” and “helicopter”. “Light-fast” is a broad reference to types of assets this research will address. Fixed-wing assets as small/slow as the commonly recognized Cessna 172 are considered to be at the low end of the threshold of acceptable application for this analysis (reasons to be discussed later), likewise modern fighters such as the F-16 Viper are generally above the threshold. In principle, the focus is on a Vietnam-era type asset, of which the OV-10 Bronco, O-1 Birddog, OA-10 Warthog and Thrush Vigilante typify this author’s mental precept. “Fixed-forward-firing” ordinance are munitions mounted on an airframe, which are capable of being employed only when the nose of the aircraft is pointed at the target, such as rockets, and/or guns. This contrasts with side mounted, targetable weapons, such as might be found in the door of a helicopter (MH-60 Blackhawk) or the side of a gunship (AC-130 Spectre). Free-fall air-to-ground munitions are weapons mounted to the airframe for the purpose of dropping from the aircraft and reaching their target only under the influence of gravity. Traditionally these weapons could only be employed in the same manner as fixed-forward-firing ordinance (pointing at the target), but new technologies now allow a greater variety of release parameters.

¹⁰ Several different terms are used throughout this work to describe the type of aircraft intended for use as described in this study; fastmover, light-fast, Vietnam-era, and fighter to name a few. The intent is not to be vague or illicit confusion, but rather that each of these terms has potential application/meaning depending on the community which is using it. Regardless of which nomenclature is selected, an asset as referred to in the previous footnote is the concept to which this author refers.

This investigation will assume a tri-pronged approach:

1. From the viewpoint of formal and informal sources, what capabilities does the U.S. want current and future military forces to posses, and how is that aligned with the capabilities of FID in general and A-FID in particular.

2. Using four broad evidentiary sources, what indication is there that attack related A-FID skills are needed in regions America has interests in. The four sources are:

- a. Statistical evidence; garnered from foreign requests for assistance sent to official government agencies.
- b. Academic evidence; gathered from leading thinkers on the application of airpower.
- c. Anecdotal evidence; collected from individuals whose profession is spent among nations combating subversion, lawlessness, insurgency, and terrorism.
- d. Real-world; observations of activities the U.S. is presently or have recently conducted that exemplify what FID, A-FID and Attack A-FID (AA-FID) can or cannot contribute to U.S. strategy.

3. If the argument is accepted that FID is an appropriate military application of power, and that there is a demand for attack related FID skills, what are the major constraints and considerations that must be taken into account for the implementation of this arm of US national power?

The FID issue is all the more relevant because of conditions in the post September 11th environment. American disposition to act unilaterally has the potential to inhibit the acceptability of future unilateral actions by the U.S. Additionally, the focus on the Global War on Terror (GWOT) has empowered the U.S. to actively seek capable allies in this war. These two factors have potentially greatly expanded the scope of possible applications of aviation attack foreign internal defense (AA-FID) roles.¹¹ Lastly, especially since 9/11, U.S. military

¹¹ FID is the generic tactic of instructing host-nations in skill sets in which they could benefit from instruction. A-FID is the application of FID to the aviation community. AA-FID is an unofficial term used in this research to include the possible spectrum of roles that assets as referred to in this paper might be tasked to accomplish. It includes CAS, FAC, OSC, interdiction, escort, and potentially other missions. When a specific mission type is intended as the reference, that specific mission is listed, otherwise a broader term (such as AA-FID) is used. Despite this research's title "Fastmover", the emphasis is not necessarily on jets or fighters in the classical sense; but merely that there is a prevalent and vital need for AA-FID missions, and a suitable focus on the types of aircraft that can conduct those roles is needed.

forces have numbered too few to execute the enormous number of tasks that need attention. FID effectively acts as a force multiplier, allowing allied nations assets to bolster the number for forces addressing issues the U.S. considers vital.

II. POLICY, DOCTRINE, AND STRATEGY

To defeat this threat we must make use of every tool in our arsenal—military power, better homeland defenses, law enforcement, intelligence, and vigorous efforts to cut off terrorist's financing. The war against terrorists of global reach is a global enterprise of uncertain duration. America will help nations that need our assistance in combating terror. And America will hold to account nations that are compromised by terror, including those who harbor terrorists—because the allies of terror are the enemies of civilization. The United States and countries cooperating with us must not allow the terrorists to develop new home bases. Together we will seek to deny them sanctuary at every turn.

- 2002 National Security Strategy¹²

A. ELEMENTS OF MODERN MILITARY POWER

So wrote President George Bush in the introduction of the 2002 National Security Strategy (NSS). US goals seem broad, resolute and unambiguous; yet the path to achieve those means is somewhat more challenging than the words that characterize the ends. As stated, one of the key elements of the U.S. national strategy is to assist nations that join us in the fight against terror. This chapter will review the official doctrine as well as the academic ken relevant to the characteristics of U.S. forces as the America wages the current GWOT. This construct of features will be compared to the properties of Foreign Internal Defense as a strategy/tactic (and specifically aviation FID) with a goal of determining whether AA-FID "makes sense" as an employment technique today and in the future.

¹² United States White House. National Security Strategy of the United States of America. September 2002. pp. 3-4.

B. SOURCE DOCUMENTS

1. Strategy

a. *National Security Strategy*

The highest level of guidance for formulating military doctrine and intent for the U.S. as a whole is the National Security Strategy. As of this writing, the latest version of that document is the 2002 publication. The purpose of the NSS is to provide overarching guidance for the various tools of statecraft that execute the elements of the Commander in Chief drafted document. In light of the events of September 11, 2001, the September 2002 NSS emphasizes a different focus and capability than previous versions. The NSS consists of eight overarching goals, five of which directly and/or indirectly address issues related to the military and foreign relations. Those five goals and their key concerns include:¹³

1. “Strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends”
 - Build coalitions and regional organizations to fight terrorism.
 - Encourage allies and partners to organize to fight domestic terrorism
 - Provide military, law enforcement, political and financial tools to assistance states that fight terrorism
 - Identify and destroy threats before they reach U.S. borders.
 - Work with States to de-legitimatize acts of terror.
 - Support moderate and modern governments.
2. “Work with others to diffuse regional conflicts”
 - Develop agendas for cooperative action with other main centers of global power”
 - Understand when States are incapable of fighting the GWOT.
3. “Prevent our enemies from threatening us, our allies and our friends with weapons of mass destruction”
 - Strengthen alliances and the establishment of new partners, even with former adversaries.

¹³ United States White House. National Security Strategy of the United States of America., September 2002. pp 8-16.

- Develop and pursue innovative use of military forces.
- Focus U.S. actions to those which clearly combat identified threats.

4. “Develop agendas for cooperative action with the other main centers of global power”.

- Ensure that America’s closest alliances (NATO is given as the relevant example) have appropriate combat contributions to make coalition warfare.
- Use the power of the American economic and defense industry to transform allied military powers (again, NATO is the specific reference).
- Build and nurture the capability to fight together with U.S. allies.

5. “Transform America’s national security institutions to meet the challenges and opportunities of the twenty-first century”.

- Develop temporary access arrangements for the deployment of U.S. Forces.
- Strengthen joint operations
- Conduct operations in a fiscally responsible manner.
- Provide the Commander in Chief a “wider range of military options”.
- Ensure the Department of State (DoS) has the necessary funding to ensure the success of diplomatic efforts.
- Develop diplomats with broader a basis of international issues and subject matters.
- Recognize the increased interconnectivity between domestic and international affairs.

b. National Strategy for Combating Terrorism

The National Strategy for Combating Terrorism became a significantly more focal document in the wake of the September 11th World Trade Center bombing. The current edition (February, 2003) provides focus for the powers of the state, with regards to the increasingly prominent threat of terrorism. This has driven the spotlight towards a greater “international actor” mindset. Again quoting the Commander in Chief,

The struggle against international terrorism is different from any other war in our history. We will not triumph solely or even primarily through military might. We must fight terrorist networks, and all those who support their efforts to spread fear around the world, using every instrument of national power – diplomatic, economic law enforcement, financial, information intelligence, and military.”¹⁴

The document devotes significant time addressing domestic concerns, but then substantial guidance is rendered with regards to the military and foreign relations on a number of issues:¹⁵

- Application of military strength is not the universal application to fight the war on terror.
- The U.S. must find applications for the indirect use of the powers of state.
- The quest to preserve American security must be done at home and abroad.
- U.S. focus should be on “identifying and diffusing threats before they reach American borders.”
- The greater the diversity and persistency of attacks against terror organizations, the greater will be the successes.
- The capability must be achieved and maintained to execute “global reach” in the ability to fight the GWOT.
- Continue to foster the old, but also create new alliances to combat terrorists.
- We must, “rely upon and assist other states to eradicate terrorism at its root”.
 - “Where states are weak but willing, we will support them vigorously in their efforts to build the institutions and capabilities needed to exercise authority over all their territory and fight terrorism where it exists.”
 - “Train foreign governments in tactics, techniques, and procedures to combat terrorism”.
- Terrorists will gravitate towards states that lack the capability to effectively combat them. Such states exist in all regions of the world.

¹⁴ United States White House. National Strategy for Combating Terrorism. February 2003. p 1.

¹⁵ United States White House. National Strategy for Combating Terrorism. February,2003. pp 1-21.

- It will be beneficial to build coalitions and regional organizations to fight terrorism.

c. *Homeland Security Strategy*

The Homeland Security Strategy is a new document drafted in the aftermath of the September 11th World Trade Center bombings. This first edition (July, 2002) provides focus for the powers of the state as well as the populace, with regards to the newly prominent threat of terrorism. Although the document is predominately aimed at domestic concerns, military related concerns and foreign relations are discussed where appropriate:¹⁶

- Government spending must be constrained where able.
- Homeland security is not just a domestic issue; the nature of modern terrorism requires a global approach to prevention.
- Terrorist's networks are increasingly more sophisticated.
- Unstable regions create environments conducive to terrorist's organizations.
- The Department of Defense (DoD) contributes to homeland security through overseas military operations.
- The U.S. must work with traditional allies and new partners to effectively combat terrorism.
- Multilateral, bilateral and new coordination mechanisms are required to execute this strategy.
- The U.S. will provide foreign nations with "specialized training and assistance to help build their capacities to combat terrorism. Some of these programs are military in nature...[including] the provision of equipment for enhancing border security and customs capabilities."

2. Doctrine

a. *United States Special Operations Command Posture Statement*

Like the previously referenced documents, the United States Special Operations Command (USSOCOM) Posture Statement provides broad based guidance on the organization and operation of Special Operations Forces

¹⁶ United States Office of Homeland Security. National Strategy for Homeland Security. July, 2002. p. 60.

(SOF). Because this level of guidance is getting farther from the policy level, and closer to the execution level, the emphasis shifts from “what needs to be done” to “how it needs to be done.” Nevertheless, there are several broad references applicable to this discussion. SOF must: ¹⁷

- Have the skills to operate in environments with higher physical and political risk.
- Be able to act in concert with conventional forces, and in autonomy from friendly support structures.
- Be specially selected, trained and organized to execute their unique mission.
- Exhibit exceptional maturity, initiative, education and experience.
- Use presence to assure allies and friends of U.S. government resolve.
- Provide a wider array of options to political leadership.
- “Facilitate the development of indigenous capabilities to fight against terrorists and rogue regimes.”

b. Air Force Doctrine Document 1

Air Force Doctrine Document 1, *Air Force Basic Doctrine* (AFDD-1) is the principle document for providing the Air Force its focus. The concepts are built on the framework established by the National Security Strategy, and identify four points salient to this discussion: ¹⁸

- Effects not platforms are the focus of operations.
- It is the right force, not equal shares of the force that should be tasked to an operation.
- The nine Clausewitzian principles of war (unity of command, objective, offensive, mass, maneuver, economy of force, security, surprise, and simplicity) are valuable constructs for understanding and utilizing airpower.

¹⁷ United States Special Operations Command. United States Special Operations Forces Posture Statement 2003-2004: Transforming the Force at the Forefront of the War on Terrorism. pp. 7-29.

¹⁸ United States Air Force. Air Force Basic Doctrine: Air Force Doctrine Document 2-3.1. 17 November 2003.

- The seven tenets of air and space power (centralized control and decentralized execution, flexibility and versatility, synergistic effects persistence, concentration, priority, and balance) are unique features of operating in the 3rd dimension, and must be considered in operations.

Although AFDD-1 is an Air Force generic document, it also addresses several points specific for Special Operations:

- Special Operations can function at the strategic, operational and tactical level or warfare.
- Special Operations must be able to function in situations with high political, environmental and operational constraints.

3. Academic Findings

There is a significant and continuously expanding body of knowledge that discusses how the academic community believes the military should be trained, organized and equipped, especially in light of the events of 9/11. Unlike the previous section, the credible and relevant source data from academia includes some material slightly more dated. This thesis will emphasize material from prominent sources (such as government agencies and respected academic institutions), of recent release (particularly post-Gulf War I for airpower related issues and post 9/11 for modern force structure and GWOT concerns), and those that focus on issues specifically relevant to this research. As in the previous section, the discussion will roughly follow a “big to small”, “strategy to tactics” approach.

A preponderance of the academic material accentuates three questions. What external pressures place demands on the U.S.? What internal pressures place demands on the U.S.? And what force structure related constraints drive appropriate capabilities?

a. *External Pressures*

Several prominent and recurring themes appear throughout academia with regards to what exogenous influences are affecting the shape of

the military today. The major themes include; the ascendancy of “small wars,” technology and weapons proliferation among enemies, and the rise of modern terrorism.

“Small wars” have gone by, and continue to be called many different names; Low Intensity Conflict (LIC), guerrilla wars, and Military Operations Other Than War (MOOTW) to name just a few. Aside from the nuances and political pressures that determine when it is appropriate and vogue to use one term over another, most are in agreement that these types of conflicts have been and will continue to be, a major influence in the world. The RAND Corporation noted that these operations have moved from “sideshow to center stage”, and determined that the Army and Air Force had experienced a two to three-fold increase in such operations since the conclusion of the cold war.¹⁹ And although RAND observed that the DoD has traditionally argued that the LIC environment is a subset of more conventional operations, RAND believes they are qualitatively different from traditional combat roles, and the “military can no longer ignore the fundamental issues they raise.”²⁰

Related to the issue of guerrilla warfare and insurgencies, the RAND Corporation conducted another study attempting to characterize the “how and where” of future conflict. Their analysis is synopsized in the following chart which depicts “regime control over territory and populace” on the Y-axis and “regime’s attitude toward terrorist groups” on the X-axis. In short, states with strong control allow for mechanisms to combat terrorism outside of the overt use

¹⁹ “From Sideshow to Center Stage: Military Operations Other Than War”. Rand Review, Fall, 1997. p. 1. This page reference is from the Rand Review of the full Rand article by , Jennifer M. Taw, and Alan Vick. "From Sideshow to Center Stage: The Role of the Army and Air Force in Military Operations Other Than War," Strategic Appraisal 1997: Strategy and Defense Planning for the 21st Century. Fall 1997.

²⁰ “From Sideshow to Center Stage: Military Operations Other Than War”. Rand Review, Fall, 1997. p. 1. This page reference is from the Rand Review of the full Rand article by , Jennifer M. Taw, and Alan Vick. "From Sideshow to Center Stage: The Role of the Army and Air Force in Military Operations Other Than War," Strategic Appraisal 1997: Strategy and Defense Planning for the 21st Century. Fall 1997.

of military force. Whereas “weak” states, depending on their view of inhabiting terror networks, are predisposed toward a wide range of military related activities for resolving the situation.

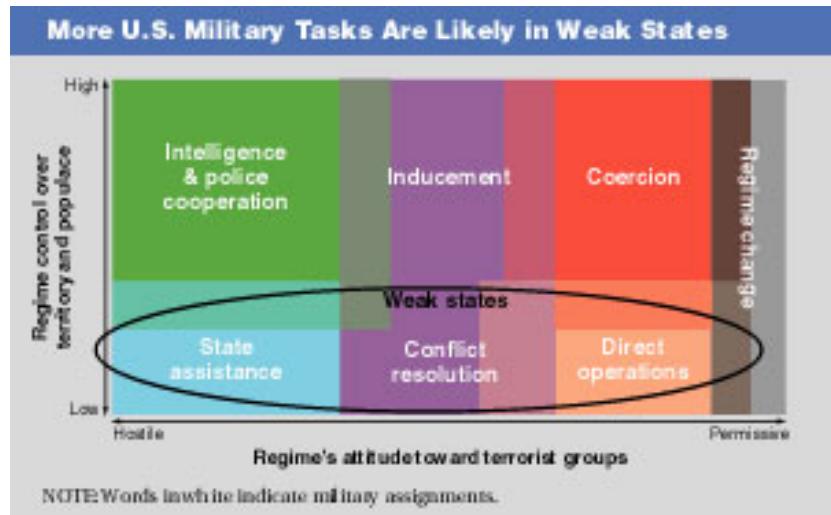


Figure 1. Military Options in Various State Types (RAND)²¹

“The projections of both liberal and conservative pundits and prognosticators seem to show the Global War on Terrorism to be headed for 10 to 15 year duration.”²² RAND argues that “...newly important military tasks stem from the increased likelihood of significant operations in fundamentally weak states,” specifically including state and security assistance roles such as; combined military operations, military advisors, training, military to military contacts, and humanitarian operations.²³ This study also suggests that the Air Force should expect a “heightened demand for military coalition support activities (e.g., military-to-military contacts, training, education, and exercises) and an increase in overseas temporary deployments for USAF personnel with language and diplomatic skills.”²⁴

²¹ Edward Harshberger. “Global Implications for the U.S. Air Force”. *Rand Review*. Summer 2002. p 1.

²² Timothy L. Hale. “Building Future Success: Developing a Total Force Template for Air Force Special Operations Command”. p 17.

²³ Edward Harshberger. “Global Implications for the U.S. Air Force”. *Rand Review*. Summer 2002. p 1.

²⁴ Edward Harshberger. “Global Implications for the U.S. Air Force”. *Rand Review*. Summer 2002. p 2.

Even if the U.S. were to move towards a more nationalist or isolationist focused foreign policy, it has been suggested that MOOTW will remain a mainstay of U.S. activities. “All indicators suggest that MOOTW directed at narrower, national goals, (e.g., counterproliferation, counterterrorism, noncombatant evacuation operations, and counterdrug proliferations) are likely to continue under any conceivable national security policy.”²⁵ If that is the “low end” of U.S. participation in world politics, American reaction to the events of 9/11 suggest that for at least the foreseeable future MOOTW and anti-terror type actions by the U.S. will exist at a level significantly higher than the minimalist scenario described above.

In *Defeating Insurgents with Technology*, Colonel Jeffery Barnett investigated the nature of modern warfare and concluded that from the U.S. standpoint, it seemed to be characterized by two themes: technological dependence and the rise of insurgencies. With regards to the second, he suggests, “Although conventional aggression (such as the Korean War and the Gulf War) will continue to threaten U.S. interests, insurgencies will probably persist as the most likely form of conflict in which U.S. military forces may be called upon to fight.”²⁶

In some fashion, terrorism has become the modern subset of the “small wars, insurgencies and revolutions” discussion. Since the events of September 11th, the National Security Strategy has come to revolve around terrorism as the major threat. Publication of the doctrinal documents discussed above are evidence of the strategic recognition of the importance and impact of terrorism as the “poor man’s weapon” having risen as a mainstream combat technique.²⁷ Compounding the difficulty in fighting these smaller wars and terror

²⁵ Alan Vick, David T. Orletsky, Abram N. Shulsky, John Stillion. “Preparing the U.S. Air Force for Military Operations Other Than War”, Rand, 1997. p 3.

²⁶ Jeffery R. Barnett. “Defeating Insurgents with Technology”. Airpower Journal. Summer 1996. p 1.

²⁷ Russel D. Howard and Reid L. Sawyer. Defeating Terrorism: Shaping the New Security Environment. 2002. p ix-xii.

based actions is the ease with which the opposition forces are acquiring better technical infrastructure, especially weapons and communications.

All of these concerns collectively draft a picture of a turbulent world characterized by small conflicts in which America will have a vested interest to participate. Additionally, evidence suggests that these small wars posses the potential to be more difficult challenges than in the past.

b. Internal Pressures

The previous section focused on the forces that place pressure on the U.S. from outside the nation, but constraints are not confined to those generated exogenously. In this era of heated politics, talk of a new world order, the perceived polarization of the American populace and a rising national debt, some constraints are generated within.

The political wherewithal to respond to a situation with the use of military forces is no small endeavor. The “military option” can be leveraged by increasing the breadth and variety of military responses. In the future the U.S. should expect that the palette of choices is more diverse than a conventional “Normandy” or super secret “Desert One”. Indeed, the repertoire of military applications is broad, but the demands of a new threat in a new era challenge the U.S. to understand the enemy and adapt options to confront the threat. The source of the pressure to develop a palette of choices is the customer (civilian and military leadership) to whom America is challenged to provide innovative and cost effective options for the GWOT.²⁸

Thinking about participating in small wars by assisting, integrating with host forces, or intervening leads to knotty questions on national will, political guidance to the military, and the military's ability to act as an instrument of U.S. foreign policy in situations short of declared war. These questions lead, in turn, to others regarding specific military capabilities. Do we have the proper equipment, doctrine, tactics, training, and personnel selection by the services? Are we ready to provide a series of military options to political decision makers in situations short of war?²⁹

²⁸ NSS, NCST, and USSOC Posture Statement.

²⁹ David J. Dean. :The USAF in LIC: Air University: Maxwell AFB, Oct 1986. p. 2.

So as the U.S. continues to define its role in the world and exercise its foreign policy, high value is placed on developing new and innovative approaches to problem solving. Military capabilities outside of traditional “force-on-force” applications effectively expand the political diversity by which the POLMIL (Political and Military) system, can negotiate the political battlespace. An increased breadth of military responses also opens the door for options that may be more palatable to the American populace or agreeable to the international community.

But as with any resource limited system, there are disparities between what is wanted and what is possessed. Notably, the differences are often a manifestation of budgetary constraints. A report of the National Defense Panel noted, “Defense enters this era of geopolitical and military technical transformation within an environment of declining resources. And what the U.S. does today shapes the capability twenty years down the road.”³⁰ The panel further noted the powerful synergy possible by “fiscal burden-sharing” which can be used to “help promote efficiencies in an era of constrained defense budgets.”³¹ Although the catastrophic events at the World Trade Centers have created a fiscal and willpower windfall, it would be folly to assume that such an abundance of resources will last for long.

Internal pressures force America’s hand to consider and develop expanded tools of statecraft, especially in regards to ways in which the U.S. can fight the GWOT. As the U.S. pursues these paths, monetary limitations must be considered. Ideally these two influences would drive a politically and militarily diverse organization that can operate at a relatively low cost. Such an organization would be said to be of “value added”. Although many pretenders may attempt to fulfill this role, only time can conclusively show that any particular piece of equipment, specific tactic, or military organization can meet the long term objectives of inexpensive and effective.

³⁰ National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. p 1.

³¹ National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. p 5.

c. Force Structure

Commensurate with the academic findings regarding external and internal pressures that shape the modern military, they are accompanied by general recommendations designed to tailor forces to the correct focus.

Most prominently discussed among future requirements is the need for the U.S. to embrace combined operations. The U.S. must not be confined to merely conducting operations hand-in-hand with allies (such as the U.S. relationship with the United Kingdom in Desert Storm I and II), but also in new and innovative relationships. In the wake of the cold war, the National Defense Panel conducted a study designed to characterize the nature of military operations in the 21st century. They concluded that many modern, emerging challenges do not respect national boundaries and therefore will require international cooperation to resolve. Thus, one of their major findings was to emphasize a “much greater role of jointness”, and a “review of how we approach and incorporate our allies”, as well as recognition that “international operations are becoming the norm for our defense industry”.³²

Particularly applicable to this discussion, they also recommended the following broad sweeping guidance:

As the formal alliance structures of the past evolve, our ability to operate with formal allies or ad hoc coalition partners, or to cooperate with nongovernmental or international organizations, will depend increasingly on professional relationships at all levels. To develop these relationships, we must create more opportunities for our military forces to work with allies and potential coalition partners before crisis develop. As we consider the changing character of alliances in the future, we must not lose sight of their purpose: they must improve not only our security, but also the security of our allies. It cannot be a one-sided relationship.³³

There is a ubiquitous amount of concurrence on this issue;

³² National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. pp 1-5.

³³ National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. p. 5.

- “Communication and other interoperability requirements may become increasingly difficult, even while coalitions operations become more prevalent. The U.S. military will have to seek new avenues for interoperability training with an increasing number of actual and potential allies.”³⁴
- …”yet to take advantage of new technologies and the contributions that…our allies and friends around the world, can make to national security.”³⁵
- “But the strategic environment also requires the capability to help other countries fight and win their own wars.”³⁶
- “strengthening alliances to defeat global terrorism, building cooperative partnerships with the other major powers…working with other nations to diffuse regional conflicts, and preventing our enemies from threatening us, our allies, and our friends with weapons of mass destruction.” And “…pursuing regional stability through funding military aid programs and training…”³⁷

A second issue relating to force structure is how “new technologies have diminished the importance of geographic distance but increased the importance of time—and consequently the ability to respond quickly to emerging problems.”³⁸ Technology has facilitated the ability for both allies and enemies to project power, but traditional power sources (armies) are still comparatively slow to deploy and employ. Although the U.S. will always maintain a capability to project conventional forces, an array of military related options that can be enacted quickly could do much to augment national power.

Activities such as the Base Realignment and Closure Committee (BRAC) which recommends a number of U.S. military locations to close each time it meets, as well as the realignment of infrastructure in Korea, and the slow erosion of forward U.S. military presence in such areas as Europe, are all contributory to the trend of decreased dispersion of U.S. military forces in

³⁴ National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. p. 5.

³⁵ National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. p. 4.

³⁶ Norman J. Brozenick Jr. “Another Way to Fight: Combat Aviation Advisory Operations.” Jun. 2002. p vi.

³⁷ Marc Grossman. “U.S. Military Commitments and Ongoing Military Operations Abroad”. Testimony before the Senate Armed Services Committee. 9 September 2003.

³⁸ National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. p 1.

general. The consolidation of bases and troops only exacerbates the need for the current military force structure to maintain relevant skill sets and posses the ability to rapidly project that capability over long ranges, with little notice, and in quick order.

d. David Dean: The Air Force Role in LIC

David Dean in *The Air Force Role in Low-Intensity Conflict*, tackles all three prior subjects together, and attempts to address the issue of how US military forces need to be organized to effectively implement national policy. His focus is partially driven by the post Cold War mindset that third world countries will be future hotspots, and a “combination of factors will make LIC a very likely phenomenon in the years ahead”.³⁹ From this vantage, Dean suggests that America focus on the third world in general and low intensity conflicts specifically; from there he builds a case for what he sees as the benefits of a FID oriented posture.

Are the military components as instruments of national policy able to act effectively in the third world? If not, what needs to be done? The USAF (and the other services) needs to consider the question of effective assistance to third world countries as part of a basic shift in strategic thinking. Our primary strategic planning effort has been to insert large numbers of U.S. ground and air forces into an area such as the Persian Gulf to accomplish our policy objectives. That planning effort must continue, but with the understanding that inserting a major U.S. force in any third world region is extremely unlikely, both for domestic political reasons and because potential host nations are reluctant to support large U.S. forces. Our primary strategic focus for planning needs to shift to providing effective leverage for third world friends and allies. That leverage can be in the form of arms sales, training, doctrine, or even small special forces. But providing leverage depends on effective planning that builds the data base which allows us to pinpoint the host country's needs and capabilities. Developing that kind of expertise in the U.S.A., and in the other services, will be a difficult and frustrating long-term proposition. The AF must recognize the need for a change and must act upon it. Planning to exert effective political-

³⁹ David Dean Jr. “The Air Force Role in Low-Intensity Conflict”. 1986. p 13.

military influence in the third world may not be a glamorous task, but it will be the name of the game for the next twenty years and beyond.⁴⁰

Dean emphasizes that the effectiveness of the military in the evolving shape of international relations is shifting towards the importance of the projection of power without necessarily resorting to hostilities, along with a much closer working relationship with a broader range of newly defined allies. “The U.S. should have forces designed to show resolve without engaging in combat, to accomplish specialized operations such as the Son Tay raid, and to assist friendly countries facing threats to their internal security by providing advisory assistance, cadre, and ultimately, U.S. combat units that can be integrated with those of the host nation.”⁴¹

Dean’s suggests three pillars the U.S. will need to focus on, in order to empower these capabilities:⁴²

- The U.S. needs a deeper understanding of the third world, specifically their military capabilities, environments and limiting factors.
- Training, education, assistance and the transfer of capabilities need to be tailored to meet the host nation’s needs, not merely a reproduction of U.S. structures and methods.
 - To accomplish this, specific “packages” of need to be built for the effective transfer of capabilities.
 - The force executing the transfer must be specially trained in the role (linguistically, culturally, and professionally).
- The U.S. must have a rapid response capability to aid allies. To execute this properly, the above two bullets must be true first.

To this end the *Transforming Defense* study suggested, “greater emphasis should be placed on experimenting with a variety of military systems, operational concepts and force structures. The goal would be to identify those

⁴⁰ David Dean Jr. “The Air Force Role in Low-Intensity Conflict”. 1986. p. xiii.

⁴¹ David Dean Jr. “The Air Force Role in Low-Intensity Conflict”. 1986. p 4.

⁴² David Dean Jr. “The Air Force Role in Low-Intensity Conflict”. 1986. pp 76-77.

that are capable of solving the challenges that emerge or that are capable of exploiting opportunities—our asymmetric advantage—and to eliminate those which are not.”⁴³

4. Miscellaneous Directives

Several other documents that fall in the hierarchy of doctrinal information were also reviewed, and found to mirror the above findings, or have no significant additional information to contribute as relates to this topic. Some of those sources include: Air Force Doctrine Document 2 *Organization and Employment of Aerospace Power*, Air Force Doctrine Document 2-3 *Military Operations Other Than War*, Air Force Doctrine Document 2-7 *Special Operations*, and Joint Publication 3-7, *Military Operations Other Than War*

C. CONCLUSIONS

Presented here is a consolidation of the features discussed previously. The list provided is not inclusive of all of the factors previously identified in the literature; rather it attempts to condense the comprehensive list to a series of overarching categories that encapsulate the spirit and intent of the full listing. The list is also not contextually rich, but a catch-phrase or snap-shot of what U.S. policy, DoD doctrine, and leading academics perceive as the key issues with regards to how the military’s needs must be focused in the years to come. This guidance includes:

1. Strengthen alliances
2. Innovate - increase the array of military options
3. Operate with fiscal responsibility
4. Engage/defeat threats before they reach us
5. Expect more “small wars”, to include insurgencies and terrorism
6. Expect the enemy to have greater technological capabilities
7. Emphasize jointness⁴⁴

⁴³ National Defense Panel. “Transforming Defense: National Security in the 21st Century Report of the National Defense Panel”. December 1997. p 1.

8. Respond quickly
9. Maintain and retain an “off the shelf” capability

Many of these “military necessities” are easy to pin on the realities/needs of a Global War on Terrorism-oriented forces structure. Emerging and persistent operational requirements suggest that although some of these factors may be more in the spotlight as of late, they are more generically indicative of sweeping changes in the nature of war and politics. In 1991, Major Moulton summarized this tendency in his analysis of competing trends in the nature of warfare:

Current trends in the international political arena, combined with fiscal constraints at home, are pointing towards a significant change in U.S. defense policy. With the drawdown of conventional forces and forward deployed units, U.S. defense interests abroad will increasingly rely on the armed forces of other nations. As witnessed in the recent Persian Gulf crisis, maintenance of vital U.S. strategic interest hinges upon the development of social, economic, political, and military institutions favorable to our foreign policy objectives.⁴⁵

Thus if Major Moulton’s argument is to be followed, the circumstances created by events such as 9/11 are merely indicative of the types of changes the modern world is experiencing. Even though the current war on terror may be taken as a singular case point for the importance of leaner, more effective, less conventional type operations, this type of focus is a founded overarching approach to future political successes using the military as a tool of statecraft.

⁴⁴ Joint Publication 1-02 defines *Joint* as “Connotes activities, operations, organizations, etc., in which elements of more than one service of the same nation participate.” And *Combined* as, “Between two or more forces or agencies of two or more allies.” But those terms are used somewhat interchangeably in this discussion. FID by definition is *Combined*, and although the skills being taught to the host nation are aviation specific, they are normatively intended to be used to support other host nation services, i.e. joint. So even though U.S. doctrine emphasizes joint, FID automatically makes it combined, thus the joint label when used here is intended to imply both joint and combined.

⁴⁵ John R. Moulton. Role of the Air Force Special Operations in Foreign Internal Defense. Sep. 1991. p ix.

III. CHARACTERISTICS OF FID

Many of the weapons and methods employed today by U.S. armed forces can be used against non-state actors. Some, however, are more directly applicable than others. U.S. experience in conducting Close Air Support (CAS), employing Special Operations Forces (SOF), and advising friendly governments in using aviation to defend themselves from insurgents and terrorists may form a basis for building capabilities against non-state actors.

- Christopher Bolkom and Kenneth Katzman⁴⁶

A. INTRO

Having investigated and characterized what the civilian and military leaders expect out of the application of U.S. military forces, it is now possible to compare and contrast those expectations to the actual/expected characteristics of foreign internal defense. The academic marriage of the list of desired capabilities to the doctrinal, academic, and operational features of FID should allow a broad reaching characterization as to whether FID generically, and AA-FID specifically, “makes sense” as a strategy and tactic.

1. FID and Aviation FID

Below are each of the nine “key features” identified in Chapter 2, as well as discussion relating how FID and aviation FID contribute to meeting those ends.

a. ***Strengthen Alliances***

Efforts devoted to strengthening alliances come in several different “flavors” and for a multitude of different purposes. One of the prime reasons for working with U.S. allies is in the quelling of troublesome international trends before they reach American shores. Air Force Doctrine Document 2-3.1 *Foreign Internal Defense* specifically notes aviation FID’s role in this as, “Air Force FID operations can help improve host nation air force contributions to peacetime stability and development, help prevent an outbreak of violence during the early

⁴⁶ Christopher Bolkom, and Kenneth Katzman, “Military Aviation: Issues and Options for Combating Terrorism and Insurgency”. 24, Jan. 2005.

stages of an internal confrontation in the host state and help prevent the establishment of terror organizations in the host nation.”⁴⁷

Increasingly, conflict resolution in the world is approached multilaterally. Thus aiding allies prepares and creates a more capable allied force when operations occur, but also “multinational participation lays the groundwork for future contacts between U.S. and host nation personnel by establishing mutual understanding of FID-IDAD requirements and objectives.”⁴⁸ Similarly both gain a better understanding of how nations operate, so that future events can be conducted with greater connectivity and efficiency. According to Dean,

Working with foreign air forces enables the U.S. Air Force to gain tremendous insight into the capabilities, limitations, and potential of those air forces. This arrangement provides the essential knowledge needed to establish meaningful assistance programs that result in the appropriate growth of the host nation’s air arm. Additionally, by working in an environment that could become a low-intensity battlefield at some point, the Air Force personnel involved in the training would gain knowledge invaluable should the United States need to intervene. Developing true interrelationships between the U.S. Air Force and other air forces has the potential of increasing the political stability of a region and increasing U.S. access to the region, and could even result in gaining a U.S. proxy there.⁴⁹

This is one of the rarely recognized force enhancing features of utilizing FID. While Combat Aviation Advisor teams are downrange in the host nation, they spend anywhere from less than a week to several months working directly with a whole range of individuals; from U.S. embassy and DoS personnel, to host nation elected officials and junior military enlisted soldiers. This breadth and depth of contact builds inroads that can be exploited in a variety of manners:

⁴⁷ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p 3.

⁴⁸ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p 42.

⁴⁹ David J. Dean. “The Air Force Role in Low-Intensity Conflict.” 1986. p 78.

- Developing personnel with practical knowledge of procedures and probable obstacles to deploying to remote/politically challenging locations.
- Building professional and personal relationships that facilitate U.S.-host nation cooperation.
- Developing personnel with a solid understanding of specific operational features of friends and allies.
- Practical experience of personnel working in real-world tactical situations.

The fruitful products of these types of operations manifest themselves frequently, and are captured in the sentiment of AF FID doctrine, “Time and time again, anti-access dilemmas have been overcome through bonds of trust forged between advisors and foreign military leaders.”⁵⁰

b. Innovate - Increase the Array of Military Options

In the modern construct, Foreign Internal Defense is innovative unto itself, as it brings capabilities to the table not previously possible. Recently, FID has demonstrated the unique breadth of options that unfold when savvy and forward thinking personalities are aware of what FID can do. Aviation FID activities conducted during Operation Enduring Freedom and Operation Iraqi Freedom are not available as open source. But interviews with 6 SOS personnel suggest that one day history will reveal the novel, unique, and “attainable by no other reasonable mechanism” contributions that A-FID made to those conflicts.⁵¹ Even within the concept of foreign internal defense are numerous tactical, operational, strategic and political levels at which a strategy may be implemented. For A-FID, the major categories of interaction include; the transfer of defense articles and services, assessments of foreign military aviation capabilities, training foreign military forces, providing advice for military forces and government agencies, assisting aviation forces in executing specific

⁵⁰ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. 3.

⁵¹ Various members of the 6 SOS contributed a number of anecdotal stories concerning aviation FID personnel, especially in Afghanistan.

missions or contingency operations, facilitating the integration of multinational operations, and providing direct support to host countries.⁵²

In addition to the variety in types of operations that can be performed, there is also a spectrum of participation.

Thus in LIC U.S. policy makers can use military forces to accomplish political objectives without using massive resources, and can do so at a controllable level of escalation....U.S. forces would likely be assisting friendly countries rather than managing the conflict unilaterally. Should a small war escalate to a level where larger U.S. forces were involved, the objectives and management of the conflict could shift the level to the intervention level, and an expanded U.S. effort to control the war rather than merely assisting a friend would be expected.⁵³

Lastly, FID is unique in that is one of a very few ways in which to achieve military objectives without engaging in actual combat activities and/or conducting covert operations. In a time of peace with no American soldier facing combat related risks, political to political negotiation along with the appropriate expenditure of funds, and the deployment of a FID team can result in the definitive attainment of a specific military objective. Few options currently available to political or military leaders can make such a claim, or provide such a result.

c. *Operate with Fiscal Responsibility*

Military monetary mindedness is contemporarily relevant for reasons as recently reported by Oxford Analytica; “[President Bush] substantially increased US foreign aid budgets, and launched several major new initiatives” but “working within stretched budgets will be a consistent theme in US aid programmes [sic]”.⁵⁴ But there are several ways in which FID can contribute to minimizing the fiscal significance of military expenditures. First, the expenses associated with garrison operations of an aviation FID organization are less than

⁵² United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. pp 3-5.

⁵³ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. pp 7-8.

⁵⁴ Oxford Analytica. “United States: Tight Budget Constrains Foreign Aid”. January 05 2005.

that of maintaining the corresponding breadth of indigenous capability. Currently one FID squadron teaches dozens of operational skills to dozens of countries, with only several aircraft on the ramp and a comparatively small, several-million dollar budget.⁵⁵ To autonomously conduct the same breadth of operations outside of the FID construct would essentially require a separate organization for each of the major skill sets that the 6 SOS teaches.⁵⁶ Second, when tactically effective, a very small number of advisors can accomplish what would take an entire flying squadron to accomplish elsewhere; thus fewer numbers of forces are required to effect change. Third, Air Force Doctrine measures FID effectiveness on pseudo-fiscal criteria; “ultimately, FID efforts are successful if they preclude the need to deploy large numbers of U.S. military personnel and equipment”.⁵⁷ Obviously this success criteria embodies several other strategic and tactical issues (small force structure, fewer American lives at risk, small deployments, etc.), but even those concepts embody a monetarily constrained mindset. Economically, these translate into an opportunity cost. Not only do the fiscally conservative operations of a FID endeavor act monetarily responsible, but what you don’t have to do by using a mechanism such as FID constitutes a savings as well.

Similarly new concepts of operations can be “experimented” with at the FID level for much less than other comparative military operations. For example, what if it was determined that the Straits of Malacca should be patrolled and controlled by helicopter borne teams to combat piracy? For the U.S. to achieve this capability, it would have to train crews to those mission elements (assuming they did not already possess them), possibly retrofit/modify the aircraft to support the tasks, then deploy the nearest assets (or the most appropriate

⁵⁵ SMSgt Hale Laughlin, 6 SOS, Personal interview, 27 January 2005.

⁵⁶ But this is not to imply that FID trained host nation assets can achieve the same results of U.S. forces autonomously performing the same role. What the 6 SOS can teach the Kazakhstani's to do in aging AN-2 Colts is minor compared to what a US Special Operations MC-130 squadron could accomplish if deployed to Kazakhstan to conduct the operation on its own. But that loss in capability by using host nation assets is replaced by the 6th's ability to conduct a greater diversity of training and at a reduced cost.

⁵⁷ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p 2.

asset, possibly from the U.S.) to Singapore (or Indonesia or whatever nation America had agreed would support said activities), then pay all the requisite monies associated with maintaining the aircrews, maintenance and support personnel at the deployed location, until such time as the efficacy of the operation could be assessed.

For an aviation FID squadron to accomplish the same result, they would only need to train 2-6 personnel (pilot, crew chief, maintenance) in the skill sets, then send them to the host nation to modify their aircraft (if required) and then teach the locals how to perform the skills; meanwhile only having to support a small footprint of downrange personnel while the new tactic was evaluated.

Depending on a whole range of issues, the time required to execute either of these two approaches could go in favor of either option, and certainly there are a wealth of other issues to consider in such a situation: is U.S. presence desired at the target location, are assets available to deploy, and is it desired that the host nation posses the capability being discussed? The costs required to “test” this capability would certainly be lower for the FID-addressed option.⁵⁸

Lastly, Arnold Abraham suggests that the U.S. should shift monies towards programs with higher payoffs, and “our ability to sway hearts and minds could be complimented with billions of dollars more in foreign economic and military aid.”⁵⁹ Since FID can be such a significant cost savings over traditional conventional approaches, FID can then be an additional cost savings tool to enhance the effectiveness of the military aid provided in-line with Abraham’s

⁵⁸ This argument ignores potential “other costs” the FID approach could incur. Later in this discussion, the merits of supporting the host nation across the breadth of FID operations will be addressed. In preview, the author suggests that if this is a capability that the U.S. strongly desired that the host nation possess, and there are doubts if the host nation will be able to sustain the capability once the U.S. has departed, then it is essential that the appropriate support mechanisms/structures, including funds be incorporated into the training plan. For this example, this might entail the U.S. giving the host nation 2 helicopters to execute this mission, which could significantly increase the costs of the FID approach. But, if this fictional night illumination of boats tactic were to remain in effect for the long run, even these expensive up-front costs of the FID approach would rapidly become secondary to the extended costs of a long-term duration U.S. deployment of troops and assets.

⁵⁹ Arnold J. Abraham, “Examining Changes in the Character and Conduct of War as a Basis for a SOF-Centric Strategy.” 2004.

suggestion. This is not to imply that this approach would work in every scenario, but rather the unique nature of FID (and its commensurate lower operating costs) can facilitate fresh approaches to problem solving, especially in the fiscal sense.

d. Engage/defeat Threats Before They Reach the U.S.

Eluded to in the “Strengthen Alliances” section, engaging/defeating threats before they reach the U.S. could be a sub-category of that discussion. But since the events of September 11th, there has been a subtle shift in policy which seems to emphasize that engaging and defeating threats, before they arise in America, is less synonymous with strengthening alliances and more about national protection.

Nevertheless, that subtle shift in policy has also had political consequences which have served to magnify the possible benefits of alternative ways to engage and defeat threats beyond U.S. shores. Unilateral or globally unfavorable actions place stress on political leaders that may diminish their capability to utilize similar force mechanisms in the future. FID is an alternative, and can be used to “build up a local capability [in the host nation] to solve the problem without massive commitment of US troops and the potential loss of life that direct combat would bring”.⁶⁰ In the long run, the application of FID is a cost-benefit analysis conducted on the tactical, strategic, political, fiscal, and security level, with the resultant opinion that, “the United States views advisory operations as a cost effective means of assisting friendly nations to deal with internal problems before they assume global dimensions and require large-scale introduction of U.S. combat forces.”⁶¹

e. Expect Increased U.S. Involvement in LIC

If the relevancy of small wars is on the rise as discussed in the “External Pressures” section, then America will need effective strategies and tactics to deal with those scenarios. Given political and monetary pressures, a

⁶⁰ William T. Eliason. “USAF Support to Low Intensity Conflict: Three Case Studies from the 1980s.” June 1994. p 5.

⁶¹ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p 3.

means is needed to effectively and efficiently deal with the low intensity conflicts that America choose (or are forced) to participate in.

According to airpower analyst Major William Eliason, “[t]he spectrum of possible LIC situations has never been fuller. In contrast to the growth of these conflicts [LICs], our military capabilities to deal with them will likely decrease. This disparity will become most visible when a response to multiple LIC crises is requested by our national leadership. Our responses to crises in the 1980’s do not provide us with a ready set of military options that addresses all forms of low intensity conflict.”⁶² Although that quote is now ten years old, and the decade of unpreparedness to which Eliason refers is 20 years past, the context seems as relevant as ever. Frustration with American foreign policy, a state of war now lasting more than four years, over extended military forces and other constraints all play into the concept that the American “bag of tricks” is not as full as it should be. Eliason implies, and this paper suggests that if these small conflicts are going to become (or have become) a mainstay of the modern political landscape, FID can cover a lot of ground in remedying the shortfall of options and forces available to deal with the spectrum of diverse U.S. interests.

FID has the multi-faceted benefit of being a small, mobile force, easily tailored to the needs of a specific situation, as well as allowing for an avenue to resolve the conflict shy of direct U.S. military participation in combat operations. Outside of this construct, POLMIL leaders are left with options that tend to be limited: large conventional military forces that are expensive to employ and difficult to deploy, or Special Operations forces that are small and inexpensive, but whose actions can carry significant political risk. FID can bridge the gap and provide the best of both worlds. Although all of that does not come without a “cost”, for in the end FID only sets the stage for the host nation to

⁶² William T. Eliason. “USAF Support to Low Intensity Conflict: Three Case Studies from the 1980s.” June 1994. p 64.

execute operations in a manner of which the U.S. hopes will be compliant with its interests. If managed well, FID can deliver the goods, but history has shown that this is not always the case.

f. Expect Enemies to Have Greater Tech Capabilities

Even though the trend in conflicts seems to be progressing towards actors not necessarily representing specific nation-states, and adversaries less advanced than traditional enemies, these new opponents are better organized, trained and equipped than ever before. Dean suggests that the weapons available to even small revolutionary groups, such as third world military organizations in general and especially to former Soviet proxy forces, will make conflicts by U.S. forces and/or allies especially difficult.⁶³ Furthermore,

Even though most 3rd world countries have not developed the technology and infrastructure to fully use the weapons they have obtained, the mere presence in third world forces of quality aircraft, tanks, artillery, and surface to air missiles makes the potential destructive capability very great. Highly capable SAMs (Surface to Air Missiles) are now available to even the smallest insurgent organization and can be used to great effect in 3rd world conflicts.⁶⁴

Countering the increased capability of well organized and equipped insurgents and terrorists is not solely a technical response, but there are certainly applications where U.S. innovation in the field of technology is a key component of the solution. Providing that capability to allies then becomes as important as imparting the wherewithal, so that they may strategically appreciate and tactically apply their new skills/equipment in such a manner as to counter the new tactics and modern technology of mutual enemies.

Because the field of aviation deals with such complex weapon systems, an especially well crafted organization with a relatively high degree of competency is required in order to employ the assets properly. Additionally, with the possible exception of air to air combat, air to ground employment/interaction represents a penultimate level of aviation expertise. No nation newly participating

⁶³ David J Dean. "The Air Force Role in Low-Intensity Conflict", 1986. p 13.

⁶⁴ David J Dean. "The Air Force Role in Low-Intensity Conflict", 1986. p 13.

in aviation can expect to be capable on their own, much less competent in any short or even medium time period. Because of this, if the U.S. expects American allies to compete with at least parity, if not superiority, against increasingly sophisticated insurgents and terrorists, there are two possible paths; slow via a long time period of host nation exploration on their own, or rapidly via some type of equipment/training transfer process. So if the U.S. government and the host nation determine the target state needs to have advanced aviation skills, FID is the logical manner in which to bridge the aviation gap. In order to impart those skills, FID organizations need to have a similarly developed level of adroitness both in the application of air power and in the curriculum designed to instruct in those skills.

g. Emphasize Jointness

Aviation FID is not a unilateral endeavor, rather it serves to support other ground and/or naval forces. This is especially true when it comes to anti-guerrilla, and COIN operations. Air Force doctrine even identifies that in most cases A-FID is “conducted jointly with other U.S. service components and combined with the activities of foreign military forces in the host nation”.⁶⁵ Dean highlights that even in the U.S., joint interconnectivity tends to be poor, and in less developed nations the problems are exacerbated.⁶⁶ International Military Education and Training (IMET) exercises are a prime mechanism for not only U.S. to U.S. contacts, but host nation to U.S. and host nation to host nation interaction, so as to better understand and exercise in a joint environment. FID is an appropriate system to facilitate IMET exercises. Typically, U.S. and host nation ground forces will be the major players in the event, and U.S. aviation FID serves as the linkage for host nation aviation assets to learn how to effectively and safely support ground forces.

Lastly, U.S. presence can impart seemingly minor and unintended benefits to the target nation. Such as, in some nations enlisted soldiers and other

⁶⁵ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p 1.

⁶⁶ David J Dean. “The Air Force Role in Low-Intensity Conflict.” 1986. p 63.

junior members of the military are still routinely berated and even physically assaulted for any grievance superiors perceive as punishment worthy, even while performing in the line of duty.⁶⁷ This even extends to situations when the junior individual's role is to provide data, but the social structure inhibits the effective flow of essential information. Especially in the field of aviation, success can be largely determined by the degree and efficiency of communication and cooperation between team members. Thus FID is a powerful mechanism for showing U.S. counterparts the value of teamwork and respect, but still within a military framework. This in turn fosters greater efficiency in host nation joint operability, and in combined joint operations. Using the military side of the FID framework similar lessons can be imparted to marginalize other problems, via the inclusion of humanitarian training, combat ethics and others relevant topics.

h. Respond Quickly

The capacity to respond quickly is dependent on several variables. First, the political structure needs to exist and operate in such a way as to select a course of action and organization to implement that path in an efficient manner. The partial intent of this paper falls into the category of educating and empowering political and military leadership so that appropriate courses of action may be selected then directed with intelligent expediency. Second, the tasked organization must have been operating in such a fashion in the past, so as to be prepared when the tasking comes, to respond in an appropriate time period. As the day-to-day function of any FID organization is to deploy to a target country, this is normally not a factor for FID oriented organizations. Third, the physical size of the deploying force effects speed of mobility. The footprint of FID operations is typically several orders of magnitude smaller than its conventional counterpart. The support structure required when a unit brings its own tactical equipment (especially in the case of aviation) downrange can easily require hundreds of personnel, and even several multiples of that for a large operation. But since each FID team member operates on the host nations "turf" (their aircraft, their hanger, their perimeter security sites or their hospital) and as each

⁶⁷ Maj Brian Downs and MSgt Steve Sims USAF. 6 SOS, Personal interview, 26 January and 10 August 2005.

team member is evaluating/teaching/assisting many host nation individuals at once, a normal FID deployment can succeed using only a dozen or so professionals. Fourth, channels must exist that facilitate the political and military implications of US forces arriving in another nation. This is where the daily activities of a culturally aware FID organization can facilitate the implementation of political decisions to send a force overseas.

Not only can FID respond quickly, but it can effect change rapidly, primarily in its ability to quickly bring an ally “up to speed”. In the late 1970s, well prior to modern aviation FID operations, the U.S. sold OV-10s, F-5Es, and Cobra attack helicopters to Morocco. The assets were intended to help that state in its continuing fight against the insurgent organization Polisario, which had been conducting operations against Morocco from the Saharan desert for years. As part of the package, the U.S. also sent pilots to teach the Moroccans how to fly, employ and utilize their new assets. For a number of reasons, these assets did not do much to change the course of the conflict, but in a very short time period America was able to lead Morocco from a moderately capable air force, to a relatively modern and formidable force.⁶⁸

i. Maintain and Retain an “Off the Shelf” Capability

The need to generate an essential military capability from scratch is no simple or rapidly achieved task. This is especially true as the nature of the equipment and mission increase in complexity. All of the services maintain assets and capabilities that they may never or rarely use, but still keep in the force structure because the capability lies ready to fill a potential and specific strategic or tactical need. The merits of systems such as the F-117 stealth fighter can be debated, typically on the issue of cost, but the efficacy of that system to meet the discrete need/capability of delivering precision munitions in the highly hostile environment of the opening hours of Desert Storm are virtually without opposition. In fact, were it not for the “cost” issue (measured across monetary, manpower, opportunity, support and other constraints) there would probably be

⁶⁸ David J Dean. “The Air Force Role in Low-Intensity Conflict”, 1986. p 38-51.

no opposition to a plethora of military capabilities (whether they be equipment, personnel or tactics) that sat poised, each ready to fill only a very specific military need, but with great efficacy.

The converse to this discussion is to ponder the response when a nation finds itself short of the assets/equipment necessary to fill a specific need. How long would it have taken to have brought a similarly effective asset on-line once the decision had been made to commit to Desert Storm, if the F-117 had not existed? How well would a modified F-16, or B-1 have been able to execute those roles? DoD currently finds itself in one these mission deficiencies: 9/11 highlighted the importance of military personnel with regional orientation, especially in linguistic skills. Having not previously identified the importance of that skill set, the services are now in their fourth year of still scrambling to find creative ways to increase the number of Airmen, Sailors, Soldiers and Marines with cultural and language proficiency. What if in 1990, DoD had decreed that all basic training programs include X months of language training? Or the services had only recruited personnel who were bilingual to begin with (and the pool of potential recruits was large enough to support this plan indefinitely)?

The benefits of an off the shelf capability are clear, the only reason they do not exist universally is either because the need has not been identified or system constraints prohibit acquiring the capability. Current A-FID has shown that by maintaining skill sets in basic fixed-wing and rotary-wing assets, they can easily, rapidly and inexpensively flex to meet a wide range of related skill sets, effectively making the 6 SOS a reservoir of military options. But due to the additional complexities of offensive operations, AA-FID skills lie just beyond the scope of the 6 SOS's "flex breadth". If the need to proffer aviation attack related skill sets to allies is seen as a potential use for U.S. forces and the capability can be attained and maintained at a reasonable costs, then it makes sense that AA-FID should exist as an "off the shelf" capability.

j. Additional Benefits

In addition to meeting the nine characteristics discussed in the previous chapter, FID brings several unique and specialized features to the

theater that can significantly empower its effectiveness. The following paragraphs outline a panoply of major and minor, unrelated contributions that FID as a tactic contribute when utilized as part of a state's power set.

Addressing a government's issues and problems with an insurgency and/or terrorism requires multiple means across social, political and military spectrums. In dealing with these issues, a nation must possess the physical infrastructure/resources that will allow them to implement their breadth of chosen strategies. Because of the flexibility of aviation, it can contribute to a wide range of possible applications.

The necessity to maintain the fragile balance in an IDAD strategy cannot be overemphasized. Military defeat of an insurgent-type organization does not equate to total victory without adequately addressing the other facets underlying the hostility—population control; social economic, and political reform; improvement of government services; civic action; civil defense; or psychological operations. The flexibility required in this type of strategy is a strong point for the application of air power. In a counterinsurgent role, air power can provide leverage through speed and mobility.⁶⁹

FID is also a bridge-builder for other capabilities. Aviation FID is routinely used to enhance and integrate skill sets the host nation already possesses. With the proper approval and preparation, a FID organization can facilitate the transfer of defense articles via Foreign Military Sales (FMS), or new tactical capabilities via Security Assistance (SA).⁷⁰ If or when a situation escalates, and U.S.-host nation agreement is procured, CAAs can operate directly with allies in the execution of hostilities. For instance, if the Philippine Army decided to use their OV-10 Broncos to conduct a rocket attack against a terrorist stronghold prior to an army ground raid, a 6 SOS OV-10 Bronco qualified, Tagalog speaking, Pacific region oriented pilot could sit in the rear seat and supply not only real time tactical advice and expertise during the mission, but serve as a link to the Bronco pilot for any additional intelligence, surveillance, reconnaissance (ISR) information that the U.S. might also be providing to assist

⁶⁹ John R. Moulton II. Role of the Air Force Special Operations in Foreign Internal Defense. Sep 1991. p. 7.

⁷⁰ Institute of Land Warfare. "Special Operations Forces: An Overview." BB 80, March 1999.

in the mission. This situation might be thought of as somewhat akin to being asked to conduct a high speed car chase in your own vehicle, and then being offered a seasoned police officer as your passenger. He couldn't drive the car, but his wealth of expertise and experience would only serve to facilitate your rookie status and mediocre equipment. Back to the Philippines, if the situation were to escalate further, and the U.S. and the Philippines agreed that U.S. aircraft would participate in the anti-terrorist operations, the CAA could then serve as an on scene liaison, and significantly increase the efficacy of follow-on U.S. forces.

Especially since the turn of the 21st century, America has personified the “evils of globalization”.⁷¹ Additionally, a perceived role as “police of the world” has done much to vilify views of America, especially in certain circles. FID is a mechanism to refute the perception of unilateral U.S. operations, and diminish the view of the U.S. as a global hegemonic father figure. Eliason argues the point in stating, “the additional benefit of this strategy is the removal of the vision of U.S. forces acting as an invading power over both friends and the foes of the conflict.”⁷²

Numerous references that tackle the specifics of working with other nation's militaries, note the importance of diplomatic and cultural skills. AFDD 2-3.1 suggests, “International skills are a force multiplier and essential to the AF's ability to operate globally.”⁷³ This marries well with directives from the same document that note, “each aviation advisor possesses a record of functional expertise in their area as well as language or cross-cultural skills”.⁷⁴ This is also in line with the 6 SOS Mission Essential Task Listing (METL), which lists its number four task as, “gain and maintain language and cultural skills appropriate

⁷¹ Ambassador John C. Kornblum. "Globalization and the New Economy: A Personal View.". Second Annual FAZ Lecture. October 25, 2000.

⁷² William T. Eliason "USAF Support to Low Intensity Conflict: Three Case Studies from the 1980s." Jun. 1994. p. 5.

⁷³ United States Air Force. Air Force Basic Doctrine: Air Force Doctrine Document 2-3.1. 17 Nov 2003. p 3.

⁷⁴ United States Air Force. Air Force Basic Doctrine: Air Force Doctrine Document 2-3.1. 17 Nov 2003. p 45.

to assigned regional orientation".⁷⁵ Team members deeply relate to the adage that until you have operated "downrange" you cannot overestimate the value of a greeting in the local language, or the detriment of a breach of local custom.⁷⁶ Some of this type of knowledge is imparted in programs such as the Cross Cultural Communication (CCC) course, and Regional Area Courses taught at Hurlburt Field's Special Operations School (SOS).⁷⁷ 6 SOS members as well as many others attend these programs, but they are no substitute for language immersion, recurring language training, home-base language labs, day-to-day interaction with fellow airmen maintaining the same skill sets, assignment to a theater oriented flight with common cultural traits, and recurring visits to the same region, and even country, year after year.⁷⁸ Via this process, FID trained individuals almost become mini Foreign Area Officers (FAO), further presenting the services with a pool of regional experts.

One last major benefit is the reemergence of doctrinal thinking on the application of airpower to small wars. Current progress in this area is hampered by the fact that the U.S. invests so much effort into technical solutions. Because of this strong "technology" vision, prominent thinkers have stopped thinking about more primitive ways to address problems.⁷⁹ The ineffectiveness of attack aviation assets in the urban setting could be a problem set with possible solutions if airpower theorists viewed the issue out of the "what can the B-2 and F-22 deliver" construct. Re-introducing the types of assets discussed in this paper may open the door for the revisiting of doctrine with regards to what a light attack asset might be able to contribute to the GWOT. In turn, an organization like the 6 SOS

⁷⁵ 6 SOS Mission Essential Task Listing. p 1.

⁷⁶ Brian Downs, Major USAF. 6 SOS, Personal interview, 26 January 2005.

⁷⁷ See, <https://www.hurlburt.af.mil/milonly/tenantunits/jsou/> for additional information on the Air Force Special Operations School.

⁷⁸ 6 SOS personnel are assigned to a flight, which is oriented regionally (Pacific, Latin America, Middle East, and Europe/Africa as of the publication of this thesis). Members may deploy with flights outside their regional specialty, but each individual is primarily assigned and responsible for a tactically relevant language, cultural and diplomatic skills, and most importantly, operations, within their area of responsibility (AOR).

⁷⁹ Richard D. Newton. Reinventing the Wheel: Structuring Air Forces for Foreign Internal Defense. August 1991, p. 2.

could serve as a focal point for subject matter experts and the genesis of strategic and tactical thought along those lines. A good example of this is Jerome Klingaman's Joint Strike Team Cadre.⁸⁰

2. AA-FID

To this point, the focus has been primarily on how FID and even aviation FID meets the list of objectives. As the scope of discussion narrows, it becomes more challenging to identify how a specific strategy/tactic (AA-FID) meets the globally defined qualifiers discussed above. This section is devoted to identifying specifically how (and what) aviation attack options contribute to this discussion.

Consider Kyrgyzstan, a nation of vital U.S. interest who "has been a dependable and outspoken ally in the Global War on Terrorism", and "provides crucial support for Coalition forces, for Operation Enduring Freedom, [and] Operation Iraqi Freedom".⁸¹ In July-August of 1999, nearly 800 Islamic Movement of Uzbekistan (UMI) guerrillas invaded Kyrgyzstan taking hostages, with the goal of fomenting an Islamic state there that might be used to later expand into Uzbekistan. Due to a lack of indigenous capabilities, the Kyrgyzstani government had to request urgent air support from neighboring allies (both Uzbekistan and Kazakhstan in this case) in order to prosecute the insurgents. A similar event occurred again 2000, where U.S. tourists were part of those taken hostage. Again, foreign air support was required to execute the campaign to free the hostages and expel the terrorists.⁸²

With the level of dedication the Kyrgyzstan government has shown towards the GWOT, their actions provide a simple scenario to ponder the value of a series of A-FID packages designed to alleviate the need for this ally to

⁸⁰ Although Mr. Klingaman's (6 SOS Executive Officer) paper has not yet been published, he has advocated building specialized teams that are "specifically organized, trained and equipped to attack and neutralize (find, fix, and destroy) small, mobile guerrilla/terrorist targets, including their defended positions."

⁸¹ Congressional Research Staff. "Kyrgyzstan: Recent Developments and U.S. Interests." CRS Report for Congress. 26 May 2005. p. 1.

⁸² Congressional Research Staff. "Kyrgyzstan: Recent Developments and U.S. Interests." CRS Report for Congress. 26 May 2005. pp. 5-7.

procure vital air support from an external government. This example is intended to show that it is fairly simple to identify allies that could serve to benefit from such an exchange.

a. Missions

From the macro viewpoint, FID contributes to “counter insurgency support [by allowing] the US government to assist a local foreign government by identifying the problems within its country, and taking the required political, economic and social actions to redress them”.⁸³ However, the term “aviation attack” generates a fairly specific mental image of capabilities, such as dropping bombs or strafing tanks, that can seem incongruous with the definition above. Those graphically offensive roles are a part of what is being discussed here, but their more important relevance is their similarity to a whole range of missions which can be directly used to support the host nation’s ability to maintain order. Interacting rapidly and accurately with the ground from the air (be it a “talk-on” from a soldier on the ground, or finding a target based on old satellite photos), surviving in a lethal environment, operating a sophisticated machine (and its sub-systems) either by yourself or with a very small crew, is a generic, but difficult to master skill set.⁸⁴ Once a nation has the assets and aircrews that posses these skills, the range of mission that can be utilized can be invaluable to any nation; Close Air Support, Forward Air Controller, Killer Scout, Interdiction, Reconnaissance, On Scene Commander, Search and Rescue, Air Borne Command Control Communications, Sandy, Escort, and Suppression of Enemy Air Defenses to name a few.

Specifically, one of the important functions of newly emergent Air Forces is the enhancement of roles previously only conducted in two dimensions. Referring to COIN operations, Moulton noted, “neutralization of the threat in this

⁸³ William T. Eliason. “USAF Support to Low Intensity Conflict: Three Case Studies from the 1980s.” June 1994. p 5.

⁸⁴ “Talk-on” is a term to describe the act of an individual attempting to talk a pilot’s eyes on to a specific target, so that the pilot may perform his mission as it applies to that target. For the discussion here, that role is usually accomplished by a Forward Air Controller (FAC) who can either be on the ground or in the air, and has a high degree of familiarity with the target environment.

type of warfare requires tactics that counter the guerrilla's advantage of mobility, surprise and deception. For the ground forces commander this is accomplished by using small-unit patrols, ambushes, night operations, and flexibility.⁸⁵ Aviation is ideally suited to supplement all of these missions from above, and can even go the next step, when appropriate, with the delivery of ordinance.

The application of CAS in combat has gone through a recent revolution in the U.S., both in number and quality.⁸⁶ Conventional wisdom holds that CAS is still not utilized or developed to its greatest capacity. A number of airpower theorists suggest that the growing momentum in the CAS community could yield significant gains with regards to CT and COIN operations. One report from the Congressional Research Staff stated,

Many of the functions inherent in CAS, such as tracking enemy forces, differentiating friendly forces from foes, quickly delivering weapons against moving targets, and closely controlling and coordinating air and ground forces to reduce the chance of fratricide or collateral damage, are applicable air-actions against non-state actors. Therefore, assessing how the CAS mission is evolving, what key challenges are inherent in the mission, and how those challenges are being addressed should provide a useful framework for assessing how military aviation may be applied to non-state actors.⁸⁷

The instrumental point is that attack aviation skill sets do not exclusively consist of the much hyped "bombs and bullets" missions. Rather, by building a nation's air force to the point where crews can drop high Circular Error Probable (CEP) bombs in a hostile environment, implies they also have, or can easily progress to, a broader range of combat related tasks that can be highly supportive of "small war" tactics.⁸⁸

⁸⁵ John R. Moulton II. Role of Air Force Special Operations in Foreign Internal Defense. Sep. 1991, p. 7.

⁸⁶ Christopher Bolkom, and Katzman Kenneth. "Military Aviation: Issues and Options for Combating Terrorism and Insurgency". CRS Report for Congress. 24 January 2005. p 6.

⁸⁷ Christopher Bolkom, and Katzman Kenneth. "Military Aviation: Issues and Options for Combating Terrorism and Insurgency". CRS Report for Congress. 24 January 2005. p 5.

⁸⁸ "An indicator of the delivery accuracy of a weapon system, used as a factor in determining probably damage to a target. It is the radius of a circle within which half a missiles projectile's are expected to fall. Also called CEP." United States Department of Defense. Dictionary of Military and Associated Terms, Joint Publication 1-02. 12 Apr 2001, amended 9 May 2005.

b. Application

Primarily though, a nation seeks these skill sets so they may employ assets in “counterland roles.” AFDD 2-1.3 defines counterland as, “operations conducted to attain and maintain a desired degree of superiority over surface operations by the destruction, disrupting, delaying, diverting, or other neutralization of enemy forces. The main objectives of counterland operations are to dominate the surface environment and prevent the opponent from doing the same”.⁸⁹ In the execution of these missions, attrition of ground troops is frequently not the primary purpose. Aircraft serve as a mechanism to enhance and support ground operations, even when the activity that the aircraft is performing is inherently offensive. Dropping bombs on a site before a ground attack is intended to shock and surprise the enemy, so as to magnify the effectiveness of the assaulting force. When a ground troop calls for fire on an enemy bunker, the intent is to prohibit the enemy from performing offensive actions, so that friendly forces may proceed with theirs. Admittedly, attrition of the enemy is a possible and plausible outcome of these types of actions, but not their purpose.

Close air support and interdiction are undeniably important in security and neutralization. Because of the nature of third-world conflicts, discretion in the use of air-to-ground armament is paramount. The primary purpose of CAS is to support ground forces in accomplishing their mission, not to replace them. Overuse and indiscriminate application of force can have devastating results....One prudent application of CAS would be in support of law officials in counter-narcotics operations. Forces would employ tactics and munitions to enhance suppression, shock and intimidation. Recourse to lethal force would only be used to support troops in contact. Interdiction also plays an important role by denying the enemy sanctuaries and limiting external logistical support. Defeating the insurgents’ abilities to organize and resupply is one method to beat them at their own games. However, as with close air support, interdiction in the LIC environment leaves no room for indiscriminate actions. Collateral damage at the low end of

⁸⁹ United States Air Force. Air Force Basic Doctrine: Air Force Doctrine Document 1. 17 November 2003. p. 80.

the conflict spectrum carries a lot more political and psychological baggage than misstates at upper levels.⁹⁰

This is a concept of crucial importance with regard to AA-FID. Low aviation-technology nations tend to perceive firepower as an end-all be-all solution to tactical problems, and aspire to apply their new found trade in not only tactically unwise fashions, but also in a manner that potentially reflects poorly on the host nation and on America. Abuses by the police in Indonesia during the early 1990s are indicative of this syndrome. Indonesian police forces had been taught skills and sold equipment by the U.S. meant to be used in a riot control scenario. While at a public demonstration, Indonesian police responded inappropriately and violently using the new tactics (and equipment) they had acquired from the U.S. and slaughtered 270 peaceful demonstrators. The international backlash and subsequent regression in relations between the U.S. and Indonesia are still affecting both countries today.⁹¹

Because of the potential lethality of airpower, and the potential some nations have to misuse it, it is essential that allies the U.S. brings on board truly understand capabilities introduced to them. As in the Indonesian example, this issue is magnified by the limits on the ability to control the host nation's use of new skills once the U.S. departs the target country. This is the true challenge of FID, and the reason that units specifically trained in not only the technical but the diplomatic aspects of this mission are paramount to its success.

In light of these drawbacks, and the fact that there is an end state the U.S. wishes to achieve, the lesson that needs to be taught is "air power can support security and neutralization efforts very effectively through counterland operations" but only when employed with wisdom.⁹² Interdiction represents one end of the spectrum, and "involves actions taken to divert, disrupt, delay, or

⁹⁰ John R. Moulton II. Role of Air Force Special Operations in Foreign Internal Defense. September 1991, pp. 8-9.

⁹¹ Frida Berrigan. "Indonesia at the Crossroads: U.S. Weapons Sales and Military Training" World Policy Institute: Arms Trade Resource Center, October 2001.

⁹² United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p. 18.

destroy the enemy's surface military forces and capabilities before they can be used effectively against friendly forces.”⁹³ These types of effects on the enemy lie almost exclusively in the realm of aviation to achieve. Conversely, the types of enemies faced in anti insurgent, guerrilla or terrorist operation tend not to be as vulnerable to this type of attack. But in the types of operations occurring in nations like the Philippines, Yemen and Pakistan (just to name a few), “air delivered munitions for CAS in site defense, convoy escort, offensive tactical maneuvers, and other troops in contact situations” can be of immense value.⁹⁴ For the reasons discussed above, attacks of this kind “should be limited to tactics and munitions designed for suppression, shock and intimidation rather than maximum lethality.”⁹⁵ Munitions and delivery mechanisms of a low tech nature with minimally required effects (usually explosive material) are superior at achieving this end. Thus bullets, rockets, Hellfires, Mavericks, or SDBs (small diameter bombs) would typically be preferred over Mk-82s, Mk-84s, “bunker-busters” or other such large munitions.

Lastly, the flexibility of AA-FID skills lend themselves to supporting other state, non-military agencies. But the same “military rules” discussed above still apply; such as when the partner is law enforcement, federal agencies, or involves actions against socially condemned activities (such as the war on drugs). “In countering other forms of lawlessness (drug, civil disorders, etc) surface operations are often aimed at controlling territory, arresting people, and seizing contraband rather than inflicting casualties”.⁹⁶

Given the general effectiveness of airpower, and the specific benefits of attack aviation assets, the challenge lays both in determining how airpower can specifically contribute to a particular conflict, then ensuring the host

⁹³ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p. 18.

⁹⁴ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p. 18.

⁹⁵ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p. 18.

⁹⁶ United States Air Force. Foreign Internal Defense: Air Force Doctrine Document 2-3.1. 10 May 2004. p. 18.

nation understands the limits of that application. Thus if FID organizations are to expand into AA-FID roles, they must continue to monitor the contexts in which they deliver these skills, and would do well to develop a “think-tank” mentality so as to possibly improve upon the rarely visited role of urban airpower.

c. *Jointness Revisited*

The issue of jointness has already been highlighted to some degree, but the relationship between aircraft and ground troops is constrained by two major factors; first, that the result of poor air-to-ground interface can be fratricide and second, that it is not reasonable to practice this interface outside of using real aircraft in the air and real people on the ground. Because of these two major limitations, any nation that plans on employing air-to-ground assets (including “benign” fighter type roles, such as FAC, Scout, Reconnaissance, etc) on their own soil must have professionally sustained training in that skill set. Due to the complexity and steep learning curve of aviation, AA-FID is the only viable mechanism to get a comparatively aviation-primitive nation to that point in a reasonable time period.

This would suggest that air-to-ground fastmover skills are not for everyone; which is a correct conclusion in this author’s viewpoint. Thorough research on the host nation needs to be conducted before commencing on the path of offering AA-FID. From there, a proper “crawl, walk, run” paradigm can be applied. For some nations, the “crawl” phase may begin with instruction on how to receive a talk-on from another airborne asset (an advanced aviation skill). While for others, “crawl” may involve entirely non offensive related skills, such as simple point to point transport operations (a basic aviation skill). This type of training may be conducted with the notion that at some point in the future, the host nation’s general aviation competence level may rise to the point where more sophisticated skill sets and platforms may be introduced, eventually including aviation attack, (if warranted).

U.S. assistance to Morocco in 1979 provides an excellent example of this type of situation. Moroccan pilots were skilled and capable in fighter related skills. When they faced a new threat from Polisario insurgent forces in the

form of the highly effective Soviet made SA-6 Gainful surface to air missile system, they requested help from the United States. Although the level of Moroccan aviation expertise was shy of what was required before they could be taught Wild Weasel tactics ⁹⁷, their proficiency has high enough that the right training and equipment did allow the Moroccan's to counter the threat.⁹⁸ This example shows the importance of recognizing the host nation's current level of aviation expertise, correctly identifying an appropriate and attainable end-state, then implementing a rational series of training steps to bridge that gap.

d. Colin Gray

As a last approach to considering what utility AA-FID might offer, consider Colin Gray's "generic" checklist for measuring the utility of special operations functions. In 1999 Gray published his eleven rules for SOF success, under *Handfuls of heroes on desperate ventures: When do special operations succeed?* Gray's historically based heuristic tool is simplistic yet powerful. Can Gray's rules contribute to the clarification of the political and operational fog that surrounds the introduction of aviation attack roles to the nation's military inventory of foreign taught skills?

At first, Gray's rules seem intuitively obvious (flexible, feasible, competent, etc), as in any lay person could have generated the same list with only a modicum of thought. To an extent that is true. What adds power to Gray's model is the explanation behind his categories. The descriptive terms that make up the list are just the bait, the bigger prize lie in the details of measuring how a force meets (or fails to meet) the concept. Even then, Gray warns that the points are not a "black and white", "pass/fail" criteria, in which success is assured if the

⁹⁷ Wild Weasel refers to the role of Suppression of Enemy Air Defenses (SEAD), which includes, "That activity that neutralizes, destroys or temporarily degrades surface-based enemy air defenses by destructive and/or disruptive means. Also called SEAD." United States Department of Defense. Dictionary of Military and Associated Terms, Joint Publication 1-02. 12 Apr 2001, amended 9 May 2005.

⁹⁸ David J. Dean "The Air Force Role in Low-Intensity Conflict". 1986. p 67.

criteria are met. The list is a tool to determine the expectation of political and operational yield from a SOF endeavor, or in Gray's words, "the opportunity to extract strategic utility."⁹⁹

Typically, models that attempt to frame questions of the suitability of an action focus on either the tactical or strategic issues. Gray's model rather, spans the spectrum from political wherewithal (strategy) down to actual competency of the team members in question (tactics). In some respects, this waters down his approach, but as the question is really aimed at determining broadly defined answers to questions of "will this work", there remains a certain amount of free-form flexibility in this approach. This particularly lends itself to analyzing the aviation FID issue for two reasons. First, the FID application of SOF is quite divergent from missions traditionally associated with special operations. As such, other models aimed specifically at conventional or unconventional operations can fail to capture the middle ground nature of the FID endeavor. Second, the act of conducting AA-FID missions still remains at heart, primarily a question of politics, but at the same time the actual conduct of these operations occur in a very unique tactical environment. Colin Gray's framework provides a flexibility that can be used to examine the issues across this spectrum of concerns.

His list is short, as are the descriptions provided below. The intent is not to instill fluency in the topic, but rather familiarity so as the context may be used for discussion with regards to aviation FID.¹⁰⁰

1. Policy Demand: Suitability of the age
 - a. SOF need to meet the distinctive policy demands of each era.
 - b. SOF need to change with the diminishing ability of conventional military options.
2. Politics

⁹⁹ Gray, Colin S. "Handfuls of heroes on desperate ventures: When do special operations succeed?" *Parameters*, Spring 1999.

¹⁰⁰ Gray, Colin S. "Handfuls of heroes on desperate ventures: When do special operations succeed?" *Parameters*, Spring 1999.

- a. SOF need permissive domestic conditions, a tolerant political and strategic structure
- b. SOF need an educated consumer, political and military patrons who appreciate what SOF should, and should not, be asked to do.
- c. SOF need a political legitimate mission.
- d. SOF need an attractive political message for the recruitment of local allies.
- e. SOF can benefit from a positive political message for the enemy.
- f. SOF need support from regular military forces generally judged likely to win.

3. Feasible objectives

- a. SOF need objectives that they can secure without the aid of regular units.
- b. SOF need protection from the fantasies of political sponsors.
- c. Decision makers must consult special operations experts before deciding on missions.

4. Strategy

- a. SOF need a high command that possesses a strategic mentality.
- b. SOF benefit from a supportive strategic context, particularly one in which regular forces need assistance.
- c. SOF need a political-military framework into which they can fit.
- d. SOF need a stable overall war strategy to which they can contribute.

5. Flexibility of mind

- a. SOF need the ability to support regular military operations, as well as to perform independently.
- b. SOF should not be doctrinaire.
- c. SOF need to exploit surprise.

6. Absence of alternatives

- a. SOF prosper when conventional operations are prohibited by political factors, ruled out as too expensive, or otherwise are deemed inappropriate.

b. Special operations prosper in conflicts suited to the skills of SOF.

c. SOF prosper in a strategic context of diminished conventional options.

7. Enemy vulnerabilities

a. SOF need an enemy with exploitable vulnerabilities.

b. SOF benefit from a stupid enemy unable or unwilling to learn from its mistakes, or unable to reduce its vulnerabilities.

c. SOF fare well when they can turn an enemy's strength into a weakness.

d. SOF can benefit from an oppressive enemy.

e. SOF need a substantial and accessible enemy rear area in which to operate.

8. Technological assistance

a. SOF need every advantage that technology can provide.

9. Tactical competence

a. Only SOF skilled in their trade should conduct special operations.

b. SOF need intensive and comprehensive study of their targets.

c. SOF need exceptional human and material assets.

d. SOF require coordination with conventional operations, or with the activities of the police

10. Reputation

a. It is most desirable that SOF should be feared.

11. History

a. Special operations need to be launched at the right time.

b. Special operations need to be studied as integral to the strategic history of conflict and war.

c. SOF need to engage the strategic imagination of historians.

The next step then is to map Gray's categories onto aviation FID, to see what his analytical tool indicates about the possibilities of AA-FID roles.

Policy Demand: “America will help nations that need our assistance in combating terror”, as introduced previously from the National Security Strategy, are indicative of the many contexts in which America now professes that empowering its allies to aid in the Global War on Terrorism is a new tenet in American policy.¹⁰¹ FID clearly fits into the picture as a prime mechanism for executing this arm of U.S. doctrine, but how do aviation attack assets fit into the picture? For the execution of autonomous operations, they play pivotal roles in tactically correct circumstances; Afghanistan providing numerous examples of what CAS, Forward Air Control (FAC), target softening, and the like can provide.

We've also shown a policy of using attack roles autonomously. In November of 2002, a UAV (Unmanned Aerial Vehicle) conducted an attack on suspected terrorists in the Yemen desert.¹⁰² This incident produced considerable media and political attention, but what if the U.S. had provided that capability to the American ally in the war on terror, and Yemen had conducted the attack on their own?

Another example of this is the Philippine capture of Commander Robot discussed earlier. What if the helicopter crews had also been trained with fixed forward firing ordinance, such as rockets, and the site had been softened prior to the attack? Or a Philippine OV-10 Bronco had been on scene, also with NVGs, providing CAS? Would Commander Robot have initially escaped? Could Philippine casualties have been significantly reduced? Could the use of Philippine ground troops have been reduced to a team only required to sweep the site, post attack? None of these may have been the correct tactic for this situation, but none were an option, as one of America's closest allies in the war on terror does not possess any of these capabilities.

¹⁰¹ United States White House. National Security Strategy of the United States of America. September 2002.

¹⁰² Craig Hoyle and Andrew Koch. “Yemen Drone Strike: Just the start?” Jane's. 8 November 2002.

It seems clear that empowering allies is a policy objective; it also seems clear that the integrated use of airpower is policy goal as well. Even given just a few examples, it seems America has already made policy the skills to which FID is designed to provide. Thus it “makes sense” that aviation attack roles provided through the FID mechanism constitute an overt and active element of policy in fighting the Global War on Terror.

Politics: To discuss this properly, the politics of both the U.S. and of the host nation need to be addressed. Usually by the time America has agreed to work with any particular state, they have the political wherewithal to support the bilateral operation being proposed, thus local obstacles are minimized. Similarly, US interaction with foreign air forces is typically an “empowering” scenario, both for the forces being taught, and as a message to the opponents, that the government is acquiring an upgrade in their operational and offensive capabilities. As the footprint of a FID operation tends to be very small (less than 12 individuals), this mechanism can aid in the minimization of the impact of foreign forces on the host nation’s soil. Further aiding the effort, typically this type of instruction is conducted as a joint endeavor, with both American and host nation forces (be they Army, Navy or Marine) contributing to the lessons learned in the joint-combined operation. So once the U.S. has been “invited to play”, host nation politics usually present no major obstacles. Rather it is the U.S. political system that tends to places constraints on the conduct of these operations.

In the post 9/11 environment, America has had relatively “permissive domestic conditions, a tolerant political and strategic structure” as well as a “political legitimate mission”.¹⁰³ In fact, one of the great allures of FID is the entire new range of options that it affords leadership. In the former Yemen example, if the political costs had been too high to have conducted the UAV attack, FID may have been an open source (after the attack) method to have achieved the same results with fewer political repercussions and similar tactical effectiveness. Where politics causes problems is in ensuring that FID has “an

¹⁰³ Gray, Colin S. “Handfuls of heroes on desperate ventures: When do special operations succeed?” Parameters, Spring 1999.

educated consumer, political and military patrons who appreciate what SOF should, and should not, be asked to do".¹⁰⁴

From the U.S. side, as FID is a relatively "new" and not widely used tool, Combatant Commanders are generally uneducated and/or unfamiliar with the capabilities and limitations of FID forces, and the probability exists, that without an education/control mechanism, FID (especially the introduction of offensive capabilities) could be used in such a way as to cause unacceptable political consequences.¹⁰⁵ Therein lies why the political system has issue with FID. One need only look at friends turned enemies (stinger equipped Mujahedeen turned Taliban from the Russian-Afghan war), twisted purposes (Indonesian 1991 use of U.S. military equipment and tactics on peaceful demonstrators in East Timor), or future potential problems (if Pakistan forces were given CAS capability to patrol the Afghan border, how could the U.S. ensure the forces were not used in Kashmir?)¹⁰⁶ Conversely though, Army Special Forces (SF) has been conducting offensive related FID training for decades, with a relatively high degree of success in avoiding the types of pitfalls discussed here.¹⁰⁷ The loss of U.S. control of assets and skills is a daunting issue for the political process, and one that will remain at the front of the concerns against the introduction of any offensive related FID training.

Feasible Objectives: Objectives are largely driven by the Combatant Commander, who were previously identified as potential "shortfalls" in FID action channels; but realistically those are very surmountable problems. Formal education of key leaders, or incorporating FID experts on their staff could do much to assuage problems related to FID efforts being applied to

¹⁰⁴ Gray, Colin S. "Handfuls of heroes on desperate ventures: When do special operations succeed?" Parameters, Spring 1999.

¹⁰⁵ Mr. Jerome Klingaman. Personal interview, 27January 2005.

¹⁰⁶ B. Raman. "USA's Afghan Ops: A Critical Analysis". South Asia Analysis Group, 22 October 2001. And, "Indonesia". Federation Of American Scientists, March 2002.

¹⁰⁷ John Rudy and Ivan Eland. "Special Operations Military Training Abroad and its Dangers". CATO Institute Foreign Policy Briefing. June 22, 1999. This is not to imply that there have been no breaches, or that there is no potential for inappropriate actions. Rather that given the immense scope of operations that have occurred over the years, there are relatively few substantiated cases of misconduct.

inappropriate tasks. On a more tactical level, just because an agreement is entered to offer a particular nation a new aviation skill doesn't mean that the objective is feasible. Many third world nations barely maintain an air force, much less combat capable assets that can fly often enough to maintain proficiency for their aircrews in the new skill set. Without a much larger plan that 1) assesses the host nation's ability to achieve and maintain a basal level of operations and 2) provides monies to supplement operations if required, then any skills imparted on the host nation may fall useless within a short time period. In this equation, the condition of the airframes, airfields, aircrew, support infrastructure, logistics, and a multitude of other factors, must be considered. The shortfall of any one of these host nation characteristics is capable of rendering the objective unfeasible.

Strategy: Prior to the GWOT, Army FID programs had shown the generic utility of FID, and how FID can contribute key capabilities to a successful strategic game plan. Aviation FID in particular has further refined that role, especially in the post 9/11 environment. The NSS, National Strategy for Combating Terrorism, National Strategy for Homeland Defense, and other national doctrinal documents all support and point the way for FID as a major tool of national policy. The key to effective strategic incorporation/employment falls into two categories already discussed: POLMIL commitment to the concept (money, manpower, and opportunities), and leadership capable of utilizing AA-FID intelligently.

Flexibility of Mind: One of Gray's tenets in this category is the support of regular military operations. FID is unusual in that it never functions to meet its own needs. From a U.S. perspective, by definition a FID operation does not function autonomously, but operates to support host nation forces conducting both conventional and unconventional campaigns. Although the immediate benefactor is the target countries regular forces, occasionally A-FID operations revolve around another U.S. agency (Army, Navy, SOF, Marines) conducting training (or FID) with the host nation, and A-FID serves to support and magnify the gains of the bilateral event.

Absence of Alternatives: This feature is the forte of FID, and especially of A-FID. The internationally perceived unilateral nature of the war in Iraq has largely limited the already narrow scope of operations that conventional (or unconventional) US forces can conduct on foreign shores. FID's small footprint, lack of overtly offensive nature, and relatively inexpensive cost create a "permissiveness" that allows for an expanded spectrum of opportunities not otherwise afforded political leadership. As the U.S. executes the war on terror as outlined in the NSS and other documents, America will find that allies' fielded forces are a key component in that war. The relatively ubiquitous nature of "armies" means most every nation has some capability to commit troops/police against terrorists where appropriate. In some cases, a lack of indigenous skills means that U.S. FID efforts can contribute to the host nation's effectiveness in these efforts. The inherent higher associated costs of aviation, and "perishability" of skill sets means fewer nations possess the flying components to complement ground strategy.

Although transport and support related airpower is typically a requisite element of counterinsurgent or anti-terror operations, offensive related components are frequently not considered for these types of missions. But as discussed, examples in the Philippines, Afghanistan, Pakistan, Yemen, plus Columbia, Venezuela, and other locations indicate that aviation attack profiles can play a significant role. Thus, where strategically appropriate and tactically reasonable, having a CAS or FAC capability in the national arsenal expands the potential operational toolset.

Enemy Vulnerabilities: "Enemy vulnerabilities" as a Gray concept does not apply to owned forces, but is primarily considered in regard to host nation forces. Aviation attack assets bring a wealth of capabilities and concerns to the battle space previously not conducted in the third dimension. Interdiction, CAS and FAC type roles:

- Expand the physical battle space (in range) into which government forces can operate.

- Expand the physical battle space (into remote and difficult to access locations) into which government forces can operate.
- Present a technological threat that is difficult to defend against.¹⁰⁸
- Serve as a force multiplier for primary mission combat and support elements (i.e. ground forces conducting a raid).
- Present a message of government force superiority.

US operations in Afghanistan, as well as the Philippine and Yemen examples above highlight how ground forces of a relatively low-tech enemy can be particularly susceptible to the strategic and tactically smart application of airborne firepower.

Airpower in this aspect is particularly powerful in environments where the enemy considers his remote/rural location as an asymmetrical advantage for hiding from the government. Coupled with good intelligence, offensive airpower can autonomously or in concert with ground forces do much to ensure success in an operation. Conversely, the employment of accurate air-to-ground munitions by any other than a technologically sophisticated nation can be very difficult. Thus the purely offensive roles of aviation are probably of less value in densely populated areas and urban roles. But the same platforms can then still be used effectively in other support roles (FAC, ABCCC, Rescue, or Scout roles.)

Technological Assistance: This is a challenging subject for those involved in formulating and implementing FID objectives. Typically the platform itself is the technological advantage, although occasionally additional leverage can be gained with the introduction of new equipment and associated capabilities (i.e. NVGs, GPS - Global Positioning System, FLIR - Forward Looking Infra Red, extraction equipment, etc). A delicate balance must be found between the amount of technology introduced and the host nation's ability to maintain both the equipment and skills upon departure of the CAA training team. For example, an

¹⁰⁸ Although an effective air defense, much less an IADS (Integrated Air Defense System) is a virtually unachievable state for any but a well funded and technologically advanced nation, primitive air defense can be achieved relatively cheap and easily. Black market MANPADS (Man Portable Air Defense System), such as the U.S. *Stinger* or Russian *SA-18 Grouse* are highly effective, easy to operate, and cheap to acquire. Additionally, the impact of a successful MANPAD employment can be significantly detrimental to government forces especially compared to the effort used to take the aircraft down.

F-16 might be the ideal platform for the Philippine air force to conduct urban attack operations, but it is entirely unrealistic for the Philippine AF to be able to afford the Operations and Maintenance (O&M) costs associated with utilizing the F-16, much less provide enough flying hours for aircrew to maintain competency in the advanced skill sets. Conversely, the Russian built SU-25 Frogfoot might also be an acceptable platform, with a significantly reduced O&M footprint. But access to spare parts or communications suite compatibility could make that platform similarly unacceptable. Notionally, the Rockwell OV-10 Bronco (an airframe already owned by the Philippine Army), when coupled with a portable GPS, NVGs and training in joint call-for-fire procedures might provide just the right mix of technological capability and maintenance costs.

This issue must be tackled individually for each nation and for each mission type being supported to ensure the proper type of assistance is being introduced.

Tactical Competence: The 6th Special Operations Squadron, America's only Aviation FID squadron has already "solved the problem" of tactical competence. All squadron members are volunteers, required to be instructors in their field of expertise, subjected to wide depth and breadth of training upon arrival at the 6th, and maintain a highly specialized and selective skill set by utilizing host nation representative airframes.¹⁰⁹ This is not to say that the squadron can guarantee that every squadron member is at the peak of their professional expertise, but rather that a selective and robust system has been emplaced to maximize the odds that most CAAs are operating at the level of professionalism required for these challenging roles.

But switching to the actual assets that the advisors train with, this is one area in which U.S. capability falls short of that which attack aviation could provide. Historically the 6 SOS has only trained in helicopter and transport

¹⁰⁹ Mr. Jerome Klingaman, Personal interview, 27January 2005. In the ten years of the 6 SOS's existence, the squadron has had a diverse array of aircraft on their ramp, including the Casa-212, Bell UH-1N, Mil Mi-8 Hip, McDonald Douglas C-47, AN-26 Curl and other aircraft. Additionally, the squadron secures access through various other means to dozens of other platforms when a specific mission calls for expertise on that airframe.

related skills sets, and thus maintained transport and helicopter airframes. In order to provide attack related skill sets and ensure CAA tactical expertise, the 6 SOS would have to provide access to suitable platforms to maintain the requisite skill sets. Ideally the Mi-24 Hind and the C-47 Skytrain could be reasonable, affordable and representative assets to maintain helicopter and gunship aviation attack skills. But especially with regards to fixed-wing attack roles, it becomes more difficult to find the right mix. The OV-10 Bronco seems a good candidate, but would poorly suit skill sets aimed at faster moving platforms, such as the F-5 Tiger II or dedicated CAS platforms like the SU-25 Frogfoot. The T-38 Talon is a variant of the Tiger II, and the OA-10 Warthog is very similar to the Frogfoot, so either of these two could be used to train in for nations using the F-5 or Frogfoot. Whichever platform is chosen, it neglects the flight and tactical characteristics of the diversity of aviation attack platforms flown by other third world nations. Unless the 6th is willing to maintain multiple fixed wing attack platforms for training purposes, it will be difficult to keep its CAAs proficient in these skills. This “sticky issue” of tactical competence for “fighter” aviation advisors will continue to present problems for the FID community.

Reputation: The 6 SOS conducts all of their operations overtly. This is not to say that operations security procedures are not adhered to in order to ensure the safety of their deployments, but rather that FID missions are not “black ops” or secret training ventures. In order to ensure access to present and future training opportunities, the squadron stays out of the business of activities that would imply a compromise of the target nation’s interests. Likewise, they protect the interests of nations they train with by not overtly revealing the nature and extent of the training that occurs. Thus the target nations have little access to reputation based information on the 6 SOS. Occasionally countries like the Philippines choose not to keep training information closely held, and the world is privy to the contributions FID can make to a nation’s aviation capabilities. Additionally, the 6 SOS frequently conducts repeat visits to target nations and establishes a reputation and friendship with local and state forces.

Within the U.S. military, 6 SOS's reputation is built on two different factors. First is the high caliber of individuals who are selected to join the squadron; this in itself establishes a (mixed bag) reputation, as the squadron is seen somewhat as an organization of highly capable elites. The best indicator of the squadron's reputation is the word of mouth praise that various other US agencies (SF, SEAL, CA, Department of State, etc) offer after conducting joint operations with the 6 SOS. Thus, the 6 SOS does not carry a reputation of fear (as implied by Gray as important to SOF), but rather one of professional competence, both by perceived by foreign nations and by indigenous US forces.¹¹⁰

History: An aviation squadron exists today because of retrospective thinking on the topic. Despite the mystique of failure surrounding U.S. involvement in Vietnam, some viable and valuable military applications found root there. In the early '90's academics began to recognize and concentrate on the global political and military situation in the post cold war, and generally concluded that the activities of the superpowers had left a battlespace conducive to various types of small wars throughout the third world.¹¹¹ Thus ,FID was resurrected as a historically and contextually appropriate response to the "new threat".

Since aviation attack roles are currently not part of America's FID repertoire, the possibilities for historically based or forward looking roles for these assets in the hands of American allies on the war on terror, present numerous tantalizing possibilities. As an exercise in thought, imagine:

- Iraqi forces conducting autonomous coordinated CAS supported attacks on insurgent strongholds.
- An Indonesian FAC(A) talking Indonesian ground forces onto a terrorist hold-up site.
- An Omani pilot dropping accurate conventional munitions on a desert terrorist training camp with follow-on ground forces just outside lethal range, and ready to attack.

¹¹⁰ Mr. Jerome Klingaman. Personal interview, 27January 2005.

¹¹¹ David Hogan. Centuries of Service The US Army, 1775-2004. 2004.

These are not particularly “inventive” applications of airpower, but the possibility that allies could be conducting these operations with a high degree of success, rather than the US, would be a revolutionary political and military gain for America.

Where Gray’s model can be applied, it seems to be unambiguous on how it treats this issue: FID, A-FID, and even AA-FID, make sense. The policy, strategy, politics, objectives, alternatives, technology, competence, flexibility, vulnerability, and other Gray features imply an “opportunity to extract strategic utility”. But that conclusion must be weighed against what Gray would highlight as shortfalls. Problems highlighted by the Gray analysis will be discussed in the final section.

B. CONCLUSIONS

It still seems reasonable to conclude that aviation attack FID has strategic utility, but it also seems clear the path has some serious obstacles. America’s own use of airpower is essential to its prosecution of low intensity conflict operations. Operations such as Son Tay, Just Cause, OEF or the UAV attack in Yemen were dependent on the ability to project firepower from the air. The advent of the GWOT has both constricted and expanded the battlespace into which attack aviation assets might be utilized. However, the issue is not only what the U.S. can do, it is also what can U.S. allies do with attack aviation assets. Thus far it does not seem reasonable to conclude that there is no capacity for the use of these skills; but the next question that must be asked is, how extensive is the potential audience for attack aviation skills?

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IV. THE DEMAND FOR FASTMOVERS

There is a critical air power component to SORE [Special Operations Regional Engagement] that the Air force Must prepare itself to meet. Many first- and second-wave entities will face threats to their internal security that may require the proper use of air power. The fledgling air forces of these entities will require assistance in developing adequate tactics, procedures, maintenance, supply, and other support systems within their own technological imitations.

- USAF 2025¹¹²

A. EMPIRICAL EVIDENCE

In theory, empirical data could be some of the best evidence to support the demand for aviation attack related FID missions around the world. The intent would be that a review of foreign requests for aid would show that there are a small but statistically significant number of requests made each year by U.S. friends and allies for assistance in aviation attack related roles, but that the U.S. denies those requests as there is currently no formal capability to offer this type of assistance. Although the U.S. does provide aircraft, and in select scenarios accompanies those sales with some “spin up” training, there is no cadre of personnel organized, trained, equipped and designated to provide FID type training in aviation attack related skill sets, especially in a fighter CAS type scenario or in any antiquated type aircraft that typifies the Air Forces of small, lesser developed nations. Several major issues impede data collection of this nature.

First, informal foreign requests for military assistance and training from the U.S. arrive via many channels; soldier to soldier while abroad, diplomat to diplomat at social events, or General to General at conferences, as possible examples. But regardless of their point of origination, official requests eventually funnel through to the Department of State. But even then, the process is only formalized when the likelihood of any meaningful interaction appears to be high.

¹¹² “Air Force 2025”. Air University. Vol 3, Chapter 10.

Thus casual requests and inquiries for support of an activity for which the U.S. does not routinely provide support may be legitimately dismissed, and no data collected on the request (i.e. that nation X asked for training in CAS in 2004).¹¹³ Similarly, Combatant Commanders could make requests for training in their theater as well, but these requests only exist in consolidation if they were approved. All of the “not appropriate”, “disapproved”, and “don’t have the funds” cases disappeared when the requesting official wadded up his notes and threw them in a trash can. So the first obstacle is that if the U.S. did not actually provide aid to the nation, no formal records exist.

Second, there is an unwritten policy that the U.S. does not provide this type of assistance. None of the major U.S. Acts (Arms Export Control Act of 1976, Foreign Assistance Act of 1961, FY 2002 Foreign Operations Appropriations, Freedom Support Act, International Code of Conduct in FY2000 Omnibus Appropriations Act, Defense Department Appropriations FY 2002) or international agreements (OSCE Document on Small Arms, Program of Action from the 2001 UN Conference on the Illicit Trade in Small Arms) specifically prohibit the transfer of offensive skills or equipment.¹¹⁴ Many of these documents make reference to the caution required when the exchange of lethal capabilities are entailed, or outright restrictions if the target nation is non-compliant with certain actions (such as supporting terrorism), but none actually constrain what can be transferred. In line with this logic, the U.S. tends to restrict the transfer of offensive related skills and equipment to nations with which it has a close bond, and maintains a closer hold on those technologies and equipment that have greater lethal capabilities. Thus countries such as the United Kingdom are more likely to be recipients of this type of assistance than Bangladesh, and a combat rifle is more likely to be transferred than an F-16.

As aviation tends to fall into both the high technology and high lethality category, actual cases of military assistance in aviation attack roles are very

¹¹³ Non-attributable interview, Department of State, 25 February 2005.

¹¹⁴ There is a further list of restrictions on what can be transferred, usually as a function of what technology is being exported. But with regards to the type of exchanges being discussed in this research, those restrictions are non limiting.

few.¹¹⁵ Thus there exists a general perception by foreign governments/militaries that there is no need to even ask for this type of training/assistance, because aid of this nature will not be provided.¹¹⁶ Coupled together, these facets create an absence of data, and outside of polling foreign nations individually, this leaves little ability to determine empirically who and how many of U.S.'s allies desire assistance in this manner.¹¹⁷

B. ANECDOTAL EVIDENCE

Whereas the previous section was meant to capture hard data, numbers, records, and case reports, this section is intended to determine the soft data: the informal and word of mouth evidence of a need for AA-FID. The pool of potential anecdotal evidence is large, as many individuals, from the youngest Marine in Afghanistan to the most senior members of the DoS have the opportunity to collect informal indications that U.S. allies want or could use attack aviation aid. But because of the diversity of potential collection sources, it is unreasonable within the scope of this study to survey them; with one exception.

The 6 SOS is a team of aviation trained individuals who work with many key nations around the world at the tactical, operational and strategic level. As such they provide an essential and valuable source audience which is particularly

¹¹⁵ Data on this topic is difficult to locate, for reasons previously discussed. But this author found no evidence that outside of a coalition activity has the U.S. in the last 30 years provided unilateral training on “troops in contact” type, air-to-ground attack roles from a fixed forward firing asset.

¹¹⁶ Although there is no formal documentation as to this point, several individuals interviewed in the 6 SOS echoed the sentiment that they had experienced this type of reaction from their host nation peers while abroad on FID missions.

¹¹⁷ Although not included specifically as part of this research, this author finds it odd that the type of anecdotal evidence suggested above is not cataloged by the Department of State. The amount of effort to collect and maintain this type of information seems at first glance to be minimal. But the potential benefit of being able to make observations and conclusions from a long history of statistical evidence across a whole range of informal requests seems proportionally large when compared to the actual costs.

appreciative and retentive of these types of facts. The following data was collected in interviews with key senior individuals in the 6 SOS.¹¹⁸

Nation	Aircraft ¹¹⁹	Mission * , ^{**120}
Philippines ¹²¹	OV-10, SM-79	CAS
Sri Lanka ¹²²	KFir, Su-27	Interdiction, CAS
Columbia	OV-10, AC-47, A-37	COINI, CAS
Iraq ¹²³	New Air Force	

¹¹⁸ The interview questions included: "Since 2000, in nations you have worked with, have you ever...1) Been approached by a host nation individual about the possibility of providing any type of aviation attack role assistance? 2) Had a host nation individual discuss their shortfalls in aviation attack roles? 3) Witnessed a host nation inappropriately using available aviation attack assets? 4) Witnessed a host nation not using available attack aviation assets when in your opinion it would have been appropriate? 5) Considered shortfalls in a host nation's capability as it applies to aviation attack roles? Each bullet is not meant to be encompassing of the interview conducted. But rather to quickly encapsulating the interviewee's perception regarding the specific nation and attack aviation issue. Various senior members of the 6 SOS, personal interviews conducted between 25-28 January 2005.

¹¹⁹ Aircraft and Mission are only listed if specifically referred to by the interviewee. If not listed, the comment may provide explanatory remarks as to what context the interviewee saw a relation to the issue of aviation attack resources, otherwise the interviewee did not comment on assets or roles.

¹²⁰ Although Counter Insurgency (COIN), and Counter Terrorism (CT) are not specifically aviation missions they imply the opportunity to employ aviation assets as part of that nations operations against the insurgency. They are listed here as a broad category because the interviewee saw the respective national strategy (CT or COIN) as a prospective application of AA missions.

¹²¹ In the Philippines (PI), a typical tactic would be for terror/insurgent forces to attack PI forces, and upon retreat, lure them into a counter attack. On the counterattack, army ground forces would be ambushed, and request air support (OV-10). The OV-10 Broncos would not respond due to a known lack of capabilities, proficiency, and poor A/G connectivity. In scenarios where OV-10 pilots believed they could contribute to the mission and survive the operation, they would "randomly" bomb inside the designated 1:50 grid square, as that was the maximum efficacy of their attack tactics.

¹²² Manpad threats from Liberation Tigers of Tamil Eelam (LTTE) have devastated the Sri Lankan Air Force due to lack of equipment, training and tactics. If Sri Lanka is to continue using FM assets against the Tamil Tigers, they desperately need assistance oriented towards the proper tactic, techniques and procedures to increase the survivability of their fast-mover platforms. Platforms currently possessed are inadequate for the kind of roles/support needed in theater. Indicative of a common theme; a need to re-orient thinking away from a "throw whatever we have at them" towards "what is needed".

Afghanistan ¹²⁶	New Air Force	
Thailand	OV-10, A-37, F-5,	COIN
Indonesia	OV-10, A-4	CT, COIN, CAS
Laos	Mi-8	
Cambodia	Mi-8	
Vietnam	Mi-24, Mi-8	
Korea		CAS
Bangladesh		
Nepal		CT
India		
Pakistan		COIN, CT, CAS

Figure 2. Potential Training Partners: Interviews with CAAs

This listing could be considerably more valuable if the context of each reference was known. For example, if President Kumaratunga of Sri Lanka had specifically asked the Commander of the 6 SOS for assistance to better utilize their KFir aircraft in Close Air Support roles against the LTTE rebels, then that data could be held as having a higher value than a CAA who happened to notice that Indonesian A-4s sat unused on the Indonesian tarmac. But in an effort to maintain confidentiality with regards to specific details about each nation's force structure and security issues, no such breakout exists here.

While some of the references in Table 1 do reflect nation's direct requests for assistance, others are, as this category implies, purely anecdotal. Although this data cannot be used to make specific conclusions regarding the exact demands of the international community for AA mission assistance, this information does indicate that at least on an informal level there exists the capacity for development in this area.

¹²³ Both of these nations are building an AF from the ground up, and are receiving ad-hoc assets from various nations. Both require a more thought out process for what aircraft they include in their new air force. Additionally, anti-terrorist and COIN roles may be significant for them in the future, so if the argument of this document is followed, they will need AA-FID type support, and introducing that capability from the start with the correct assets is likely to be far more beneficial than trying to establish those capabilities at a later date. The topic of the future of the Afghani and Iraqi Air Force could constitute a thesis unto itself. The conclusion that they need a fast-mover COIN capability is certainly debatable, but it seems reasonable that a COIN capability would certainly be of more value than providing them with a front-line air-to-air capability. For further reading on this topic, see February 2005, <http://strategypage.com/dls/articles/200413.asp>.

C. PEDAGOGICAL EVIDENCE

Next, a departure from the observation of data points (whether they be “hard” or “soft” information) to the theoretical description of the potential application of AA-FID. Recent recognition of the contributions of the 6 SOS to current political and military strategies, directed the squadron to investigate the utility of expanding their force structure. The team designated to conduct that investigation ultimately concluded that the addition of fixed-wing attack assets was worth further/future consideration, but not within the temporal scope of their current research and recommendations. Data collected for this study though, does include much relevant information towards the question of AA-FID.

The team developed a list of priority countries to analyze. The list of countries was generated from a weighted list of factors that ranged from each nation’s will to participate in coalition goals to the importance of that nation in the GWOT, as ranked by a U.S. government agency. Thirty one nations made the listing, which were then cataloged by the air assets that those nations used to contribute to GWOT related tasks. Twenty four different type of fixed wing assets were identified among those 31 nation’s primary assets, of which 8 are attack platforms. Those 8, and number of times they appeared among the 31 countries were;

- Aero L-39 (9)
- Su-25 Frogfoot (5)
- OV-10 Bronco (4)
- Mirage (4)
- Tucano T-6 (3)
- F-5 (3)
- Alpha Jet (2)
- OA-37 (1)

There were 98 total references to the 24 different aircraft in 31 countries, the instances of the attack aircraft numbered 31, which is almost a third of the total number surveyed (See Table 2).¹²⁴

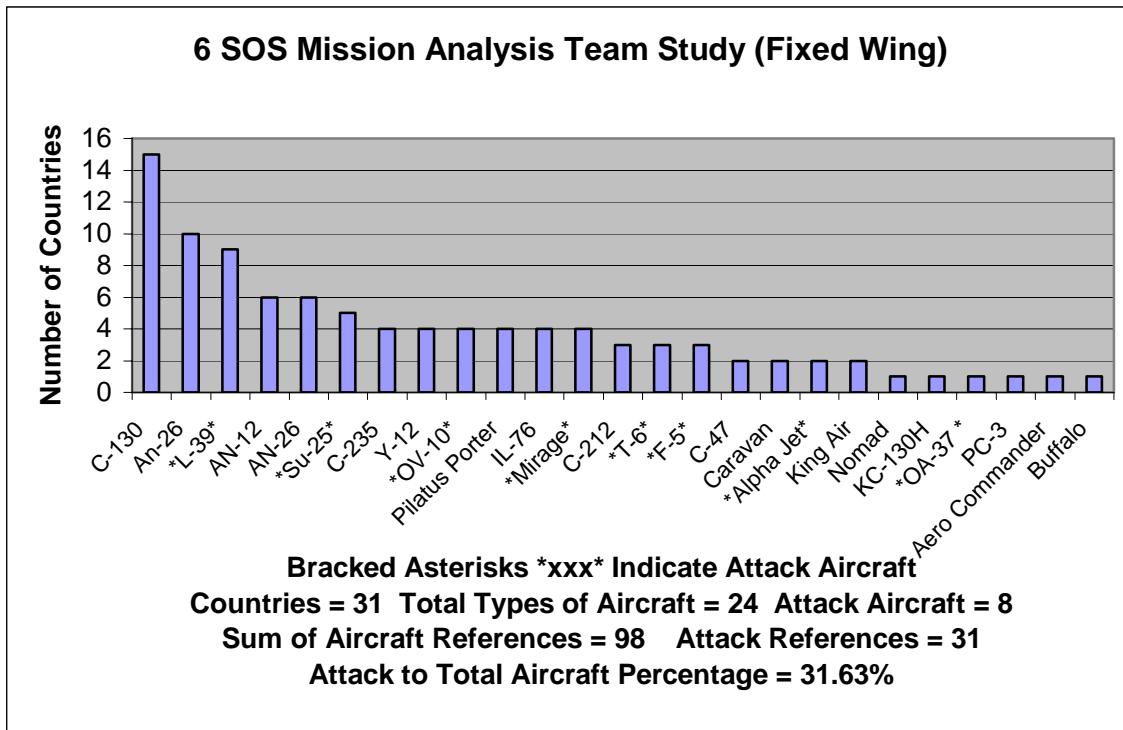


Figure 3. Potential Training Partners: Mission Types by Asset (6 SOS MATS)¹²⁵

The specific significance of this data is not overwhelmingly unambiguous, but it certainly suggests that the nations America most desires/needs to interact with have the capability to use AA assets as part of their national strategy. This suggests an avenue that the U.S. can exploit to magnify the effectiveness of allies actions, which marries well with previous discussions concerning the potential benefits of attack aviation assets.

Former commander of the 6 SOS and current airpower theorists, Colonel Brozenick, conducted a review of the types of missions requested for foreign aviation training, and built the following list of high demand missions. (See Fig 4).

¹²⁴ 6th SOS Combat Aviation Advisor Mission Analysis Team. "Anticipated Growth of the Combat Aviation Advisor Mission." 22 December 04. Official Use Only.

¹²⁵ 6th SOS Combat Aviation Advisor Mission Analysis Team. "Anticipated Growth of the Combat Aviation Advisor Mission." 22 December 04. Official Use Only.

High Demand Foreign Aviation Training

Mission packages: combat search and rescue, counterdrug, boarder security, air base defense, and aircraft maintenance.

Tactical skill sets

- Command, control, and communications
- Intelligence, surveillance, reconnaissance
- Fixed and rotary-wing infiltration and exfiltration
- Airlift low level, assault landings, and airdrop operations
- Air-to-ground interface (calls for fire)
- Fixed wing gunship operations
- Rotary-wing defensive suppressive fire
- Armed reconnaissance and convoy escort
- Individual survival training
- Pararescue operations
- Security forces (air base and site security)
- Flightline and back shop mainenance

Figure 4. High Demand Foreign Aviation Training (Brozenick)¹²⁶

Of the 12 mission types he identified as “high demand”, eight are physical aviation operations (as opposed to the remaining four air support missions). Of those eight, half (or a third of all mission types) involve employing ordnance and or weapons. Some of those roles the 6 SOS has made forays into, such as door mounted guns on UH-1N Huey helicopters, which could be used for armed escort duties. But by and large, the 6th has not focused, trained and equipped to address a major portion of the skills sets identified as most in demand.

D. REAL-WORLD EVIDENCE

This last category is meant to capture current data that attack aviation assets are being (or have been) used successfully as part of many nations’ tactics versus insurgent, rebel and terrorists forces. Many of these contemporary examples have already been highlighted in other places within this study, such

¹²⁶ Norman J. Brozenick Jr., “Another Way to Fight: Combat Aviation Advisory Operations.” June 2002. p 22.

as the Philippines, Yemen and Afghanistan cases. Several other modern examples include the takedown of Mohammad Atef (the number three leader of al Qaeda) by a Predator UAV in November 2001, a U.S. warplane attack on al Qaeda operatives that took out Juma Namangani (military leader of the IMU, and ally of al Qaeda) also in November 2001, another successful Predator attack on Nek Mohammad (pro-al Qaeda Pakistani militant) in June of 2004, and the Israelis have provided several successful case studies over the last 20 years.¹²⁷

The unsuccessful air strikes on al Qaeda training camps in the Pakistani desert in 1998 that reportedly missed Osama bin Laden by only a couple of hours, serves well to highlight the strengths and weakness of airpower.¹²⁸ Airpower definitively has the capacity to deliver focused firepower to remote or difficult to access locations, but in this example the importance of timely actionable intelligence is seen. The other “show stopper” is collateral damage. Especially as society has progressed to accepting less and less unnecessary bloodshed in the execution of combat, the potential for unintended or uncontrolled damage to elements besides the target, has become markedly more unacceptable. Numerous examples can be found indicating that a strike failed because of poor/old intelligence or never executed for concerns over collateral damage. These issues present real obstacles for the effective implementation of the roles and missions discussed herein, but are mentioned in this section to highlight the number of instances in which airpower had a contributory role to make, yet abstained due to some application shortfall.

But the successes have not been limited to the post 9/11 environment. In “Airpower in Small Wars”, James Corum and Wray Johnson provide a comprehensive look at the history of airpower in other than major conflicts. Starting at its inception, across a broad spectrum of adversaries (insurgents, rebels, factions, and terrorists) and in nations all around the globe, Corum and Johnson aspire to derive the utility of air power when applied in these “small

¹²⁷ Christopher Bolkom, and Katzman Kenneth. “Military Aviation: Issues and Options for Combating Terrorism and Insurgency”. CRS Report for Congress. 24, January 2005. p 12-16.

¹²⁸ Christopher Bolkom, and Katzman Kenneth. “Military Aviation: Issues and Options for Combating Terrorism and Insurgency”. CRS Report for Congress. 24, January 2005. p 13.

wars". The examples cover from aviation's cradle to the modern time and include a wide diversity of case studies; rebel Moroccan tribes, the Greek Civil War, the Philippine Anti-Huk campaign, French and British colonial wars, the war in South Vietnam (pre-U.S. escalation), counterinsurgencies in southern Africa, Latin American counter guerrilla operations, and counterinsurgency and counterterrorist campaigns in the Middle East over the last four decades to name a few.¹²⁹

To be sure, not all of these cases they reviewed were successes, but their data simply shows that across the history and application of airpower as it relates to usage in small wars, there have been tactical successes and strategic utility. The authors round out the spectrum of the applicability of airpower in unconventional operations by showing that although time does wax and wane the specific utility of specific types of air applications, over the long haul, airpower has and continues to provide contributive avenues to these small wars. As such, it logically follows that a demand will continue to exist for the known mechanisms of applying airpower as well as quests to discover new tasks and missions.

Author Timothy Thomas used the conflict in Chechnya as a case study of the effectiveness of airpower in low intensity conflicts, and concludes a similar discrepancy between effectiveness and the associated hazards of employment.

The air force had a golden opportunity in Chechnya to see that airpower cannot invariably work its reputed magic in circumstances where the target set is elusive, problems predominate in target location and identification and there is an ever-present danger of unintended harm to noncombatants.¹³⁰

The experience of air combat operations in the Chechen conflict demonstrated the increased role of close air support to ground troops. The participation of attack helicopters in it was limited, and front fighters and bombers could not operate effectively at low altitudes and so were not used due to their high airspeed and the shortage of time to search for targets, aim and employ

129 James S. Corum, and Wray R Johnson. *Airpower in Small Wars: Fighting Insurgents and Terrorists*. 2003.

130 Benjamin S. Lambeth, "Russia's air war in Chechnya". *Studies in Conflict and Terrorism*. October 1996. p 33.

weapons....This is why the SU-25C—a small, subsonic, reliable and maneuverable aircraft of simple design with a good view from the pilot cockpit—basically was used to support ground troops and for ground-attack operations....Moreover, it has powerful armament, rather reliable navigation and targeting avionics, and armor protection and can operate both from airstrips and an artificial surface as well as from dirt airstrips.¹³¹

Lastly, Dr. Thomas Searle, military defense analyst with the Airpower Research Institute, noted the successful use of airpower by civilian contractors in Africa and South America for patrolling insurgent/guerrilla favored targets, such as pipelines, in the vast largely uninhabited regions of those countries. Additionally, these contract security firms were able to achieve success rates comparable to nation's possessing modern air forces performing similar roles. Most significantly they used inexpensive niche platforms such as O-2s, T-6s and AT-37's modestly outfitted with several modern upgrades (such as GPS and FLIR). Because of the low cost of these assets, they were able to provide relatively large numbers of these "very effective counterguerrilla platforms".¹³²

E. CONCLUSIONS

This data is not overwhelmingly convincing for the demand of aviation attack related skill sets by U.S. allies. And unfortunately the one data source that may have been able to validate or invalidate the demand, does not maintain the requisite data. Nevertheless, taken as a whole, these four data sources do imply a definitive trend that suggests the demand exists, but probably at a relatively unrecognized and unactualized level. In short, 1) the legacy of use of aviation attack missions outside of conventional operations, 2) coupled with leading thinkers concept of operations (CONOPS) for these assets, 3) reinforced by contemporary examples and 4) further substantiated by informal data from professionals working hand-in-hand with U.S. allies seems to be subtly compelling that the demand for these skill sets is actually quite robust and likely to remain so.

¹³¹ Viktor Bezborodov. "The Su-25: A Formidable Aircraft". Armeyskiy Sbornik. no. 8. 20 July 1995. pp 34-35.

¹³² Thomas R. Searle. "Making Airpower Effective Against Guerrillas". Air and Space Power Journal. Vol XVII No. 3. p. 21.

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V. PROBLEMS AND PATHS

Maybe its time we went “retro” to a simpler, fixed-wing A-1 SkyRaider, OV-1 Mohawk or A-37 Dragonfly type aircraft.

[the A-37] could fly slow enough with a second seat observer to act as a defacto AFAC [Airborne Forward Air Controller] to spot the enemy accurately, it can [also] fly very fast. The A-37 can penetrate enemy air defenses at least as well as other unstealthy non-supersonic aircraft can, which all aircraft are when they carry bombs on external racks. The A-37 only weighs 6,000 pounds itself yet can carry a 9,000 pound ordnance load! The A-37 is thus fast, slow when it has to be, safe, easy to maintain and operate, durable, and available now at zero cost.

- Project AFAC Dragonfly¹³³

It is only necessary for SORE operators to be familiar with the overall characteristics of aircraft flow in the regional area of responsibility. It is not necessary for them to be qualified in all aircraft in the region. Subsequently, SORE aviation units need only possess aircraft that closely resemble the characteristics of aviation platforms in that geographic area.

- USAF 2025¹³⁴

A. PROBLEMS

Following the arguments posited thus far, the author suggests that U.S. doctrine and policy direct a mode of international cooperation of which the tool of foreign internal defense is a natural and logical consequence. Furthermore, academic discussion on this topic supports and reinforces that view. Additionally, that aviation FID as a sub-component of FID in general, holds the same value potential, but with in a decidedly more narrow construct, and that aviation attack FID also possesses the uniquely powerful features of general FID, but only within a very discrete range of well thought out and crafted applications. Lastly, that those who utilize airpower, both within the United States and in allied nations, recognize and desire the capabilities that aviation attack skills can contribute to

¹³³ Project AFAC – Dragonfly". 20 January 2005. p 5.

¹³⁴ "Air Force 2025". Air University. Vol 3, Chapter 10.

their political and military efforts, especially as it applies to the global war on terror. But this path also carries its fair share of hazards.

The implementation of AA-FID is obstructed by the problems associated with its realization; listed below are the shortfalls, obstacles and operational issues illuminated by this research. In the subsequent section, paths and approaches to mitigate these problems will be discussed.

- POLMIL leaders are uneducated as to what FID can and cannot do, and are thus prone to inappropriately use (or not use) FID.
- The US cannot ensure that the host nation will use the capabilities given them, for purposes the U.S. approves of.
- Foreign air forces cannot maintain an operations tempo appropriate to sustain the tactics the U.S. would offer them.
- Current conflicts are increasingly urban, and aviation attack missions are poorly suited to that role.
- There is no universal platform available for maintaining AA-FID skill sets for U.S. aircrews.
- AA-FID operations lack strategic and tactical guidance.
- When FID operations become successful, they tend to be taken over by people/organizations who do not understand their value or how to effectively use them.
- A-FID personnel have not been well trained in the past, or “off the street” personnel have been used in the absence of FID specific personnel.
- Use of antiquated airframes is conceptually problematic for Air Force thinkers.

B. PATHS

Despite these challenges the future of AA-FID is not an impossible objective. Rather, recognition of the hazards can only serve to better understand AA-FID’s strengths and weaknesses so as to facilitate success. Many operations both in the military and civil world entail risks, yet the U.S. accepts that managing the potential pitfalls can make the risk acceptable given the probable outcomes. For example, many nations use espionage as a tool of statecraft, and the risk associated with those actions can be exorbitant. Yet means are found to mitigate

the risk, and thereby make the outcome commensurate or greater than the potential loss. So should be the fate for attack aviation FID.

In 2004 U.S. Special Operations soldiers acquired the legal authority to distribute cash and equipment to individuals who aid U.S. efforts against terrorists and other targets. This role, traditionally held exclusively by the Central Intelligence Agency (CIA), has been controversial, with even supporters worrying “that it could be used to fund and arm unsavory foreign elements that might later use their U.S.-provided weapons and equipment against American interests.”¹³⁵ “In the right circumstances, like Iraq and Afghanistan, this makes sense....In the wrong circumstances it could lead us into some pretty bad stuff.”¹³⁶ Using a similar argument, the material that follows is this authors attempt to demarcate the “makes sense” from the “pretty bad stuff” outcomes. These recommended approaches for breaching specific issues that present obstacles to AA-FID implementation and operation could do much to ensure that success is the norm for AA-FID employment. The problems and recommendations are broken down into three categories: doctrine/strategy, operational and tactical.

1. Doctrine/Strategy

Issues discussed within this context are those that at some key point require that at least conventional wisdom, if not actual action, must take place above the Air Force level. Until key political and military thinkers “buy in” to these concepts, FID operations in general, and AA-FID specifically is likely to continue to face the particular problem being addressed.

a. *Pre-existing Capability*

FID is not like traditional special operations, where a short diligent planning cycle can lead to operations and attainment of the desired objective the next hour, next day or next week. FID operations take time to achieve their desired result. On the short end of the time scale, a couple of weeks may be

¹³⁵ Greg Miller. “Special Forces Enter CIA Territory with a New Weapon”. October 31, 2004.

¹³⁶ Greg Miller. “Special Forces Enter CIA Territory with a New Weapon”. October 31, 2004. Quoting an anonymous Congressman.

enough to “spin up” a host nation in an important skill set, but typically several visits and joint/combined linked exercises are required to adequately foment the lessons.

This is only possible when a robust FID organization is already in motion. The actions required to indigenously develop culturally aware, linguistically astute, mission experts can take months to years. These issues are especially true with regards to aviation assets, due to their increased complexity, support structure and the inherent risks. It is imperative that if FID is considered a “value added” tactic, that major categories of FID application be brought on-line well before their specific need is anticipated. This concept of “reacting” versus “planning” can be clearly illustrated in the short history of FID operations.

When the U.S. helped Morocco in the 1970’s with the sales of aircraft and training provided by American pilots, the U.S. got only half of the equation correct. Even though the aircrews were well trained and professional, they were limited by their lack of “indigenous” skills and a well crafted CONOPS to support them. These limitations negatively affected the overall mission, and were contributory to its shortcomings.¹³⁷ Whereas numerous recent 6 SOS operations can be used as comparison models, where each case shows that the preparedness of the mission in general, and the people specifically, is a crucial factor in defining the legitimacy and capability of crews downrange, and thusly the overall efficacy of the mission as a whole.

To “stand up” an entirely new FID capability to meet a new threat significantly diminishes its capability. Strategic thinkers must continuously evaluate what skills the U.S. may want to bequeath to its allies, and develop/maintain airmen with those (or complementary) skill sets ahead of time. Within closely related proficiencies, some ad-libbing is possible, and is actually a fundamental strength of a professional FID organization. The call to “spin up” an organization (much less a helicopter or transport pilot) to instruct in Close Air Support or the Killer Scout role, cannot occur on the kind of timeline that the

¹³⁷ David J. Dean, “The Air Force Role in Low-Intensity Conflict”. 1986. p. 65-69.

recognition for such training usually requires. Thus, even if AA-FID is seen as being a valuable tactic, but within a narrow window of applicability, to not prepare a small core of personnel and equipment now, means the capability will not be available when it is called for.

b. Ensuring Compliance

Ensuring the training/skills/equipment offered to the host nation are used appropriately is a topic of monumental concern to political leadership, yet despite the magnitude of this issue, it can be reasonably addressed. The political system needs to find stronger bonds through which to tie assistance offered to U.S. allies. Take the Pakistan example presented previously where the U.S. has promised to provide F-16s to that nation. If America's intent was to provide a mechanism for the Pakistanis to better execute the war on terror, then there could be political dangers if Pakistan instead used those assets to balance the Indian threat. Whatever asset is provided to Pakistan, the U.S. needs to carefully consider the potential short and long term possibilities of capable/modern attack aircraft residing with Pakistan. Assuming whatever the U.S. might provide is focused on GWOT type ends, America must implement safeguards to minimize the potential misapplication of those assets. Conceptually, this author could imagine an agreement that stipulates that ANY use of these assets and related skill sets (within some defined timeline, say the next 25 years), east of the Indus river would result in immediate cessation of all aid, adoption of U.S. support of Indian claims in Kashmir, and possibly even deportation of Pakistani nationals from the U.S. The example is notably draconian, but it seems clear that a deft political negotiating team could devise appropriate (yet still strong) consequences for the breach of this agreement. It might be reasoned that nations that believed the punishment too great probably would not have U.S. interests in mind in the long run, (why else be concerned with the consequences, if it was a deal you didn't plan on breaking) and thus should not be party to the technology

transfer.¹³⁸ Of course, various factors within the nation should reasonably be considered when drafting the restrictions, but Pakistan presents a good example of where it appears to be in America's interest to provide them aid, but also wise to consider the likelihood and consequences of their defection from U.S. interests.

Conversely though, if the American intent was to simultaneously insert a "balancing" influence in the region by providing Pakistan with the same generation air assets that India owns, while reaping the potential benefits of a modern asset to assist in the GWOT, the potential for abuse may be minimized. Most any action the Pakistan air force might take with their new aircraft, as long as it was not inherently "anti-humanitarian" could fall under either of the accepted premises of the reasons America offered the assets in the first place: versus terrorists or to oppose Indian actions.

Section four of the Arms Export Control Act stipulates that U.S. defense articles and services be offered only to friendly countries, for use only in legitimate self defense, internal security or for the purposes of U.N. sanctioned actions to restore peace. Under section three of that same act, if the President determines that a substantial abuse of the agreement has occurred, then a wide range of punitive options can be invoked. Since the rewrite of the arms export laws in 1976, neither the President nor Congress has ever determined that a violation has occurred. In four cases (Argentina, Indonesia, Turkey and Israel) restrictive trade actions have been emplaced for lesser violations of the trade agreements. Without investigating the exact circumstances of each of these cases, this suggests that for political reasons it has been undesirable to completely "punish" nations that have betrayed U.S. trust. This also implies that were current/future administrations willing to truly hold nations accountable, a potential wider range of countries could be recipients of assistance, but only in

¹³⁸ Not to be completely naïve about the nature of such negotiations, certainly some countries would be concerned that the US was using the agreement as future leverage to inflict sanctions and strong-arm the country in question. But despite the challenges, it should be possible to find a middle-ground with allies, where the U.S. retains certain legal/fiscal leverage that the target country will not abuse U.S. trust.

light of the knowledge that the U.S. had full intent to bring the whole array of disciplinary actions on that nation, should they renege on the terms of the agreement.¹³⁹

c. *Operations Tempo*

The inability of many host nations to be able to maintain an operations tempo conducive for sustaining advanced attack aviation skills is a daunting obstacle, but one that is essential that the U.S. consider when providing assistance. Potential allies fall into one of three general categories with respect to this issue: robust, mediocre or frail. For those nations that can maintain a robust operations tempo, there are few concerns as to whether their new skills will “wither on the vine”, but typically nations that fall into this category tend to already be tactically savvy, and thus are apt not to need aid via the FID mechanism.¹⁴⁰ Mediocre nations are those that for a small U.S. investment (man-power, equipment and/or money) could be capable of sustaining a tactical flying program, and thus represent good training partner candidates.¹⁴¹ Lastly are the frail air forces that would require substantial assistance to maintain any kind of tactical flying hour program, which unfortunately is where many of America’s target allies lie.¹⁴²

Before investing in either mediocre or frail air forces, it is essential that thorough research and government-to-government talks occur, in order to ensure that funds are being appropriately spent, and that the host nation has a commensurate understanding of America’s expectations. In these situations the U.S. needs to engage more than just the FID process; SA to provide equipment, possible FMS for other military items, Excess Defense Articles transfers, FID for the actual tactics, then IMET programs involving joint operations of both the U.S. and host nation, to maintain the skill sets. In the short run, this may mean a fewer

¹³⁹ Richard Grimmett. “U.S. Defense Articles and Services Supplied to Foreign Recipients: Restrictions on Their Use.” CRS Report to Congress, 14 March 2005. pp. 1-4.

¹⁴⁰ The “1st World”; Western Europe, Canada, Israel, Japan, Australia, Singapore, and others.

¹⁴¹ Under-funded, under-equipped, or under-trained, yet motivated nations; Indonesia, Philippines, Jordan, Morocco, Peru, or Bolivia.

¹⁴² Many “3rd World” nations; much of Africa, Afghanistan, Iraq, or Burma.

number of partners receiving more assistance, but in the long run that should translate into allies with bona fide capabilities, and not merely the appearance of competence. In the absence of deliberately crafted aid programs, the U.S. is potentially throwing away time and money. With smart and focused planning America not only maximizes the odds that allies will be effective, but also conserves its own limited resources.

2. Operational

Operational level issues are aimed at concerns and/or actions that need reconciliation at the service and/or command level. These concerns do not require attention at the national level, but are beyond the ability of individual functional units to adequately address.

a. *FID Savvy POLMIL*

Solving the problem of uneducated POLMIL leaders on the military side of this issue is not difficult. The Air Force needs experts on FID, available to initially brief Combatant Commanders and eventually to serve on their staffs to provide full time advice as subject matter experts. Although A-FID cadre as a whole are a small population, time will expand the number of individuals with direct A-FID experience, who in turn can serve as a pool of candidates to fill these positions. The continued efficacy of A-FID operations should reinforce the value of A-FID, and in turn buttress the importance of having an A-FID expert on planning teams and senior staffs.

To directly educate the political side of the house is a more difficult task, but the process of bringing Combatant Commanders on board is one avenue to spread the correct message up the chain. Again, successes of individual A-FID operations will highlight their capabilities and contributions and cause civilian leadership to ask more questions about this field, at which point FID experts and educated senior military leadership can champion the cause of A-FID, while at the same time imparting valuable knowledge on its strengths and weaknesses.

Conversely, the opposite is true as well, but this is all the more reason for there to exist a cadre of A-FID experts outside of the 6 SOS. These

specialists can serve as the link to explain how/why particular operations did not meet all objectives, and increase the expectancy of efficacy the next time by providing an essential link between the leadership and the operators. To date, 6 SOS deployments have been predominately “success stories”, with several having been pivotal in simply highlighting the squadron’s existence. More importantly, these events have resulted in a broader knowledge base of the nation’s military options and in several cases, a decision to invest more into the A-FID mechanism.

As one last example of the type of issues A-FID cadre members could address in their role as subject matter experts, Colonel Wray Johnson neatly summarized in an article titled “Ends Versus Means: The 6th Special Operations Squadron and the Icarus Syndrome”, how the senior leadership in some regards has come to acknowledge and respect FID as a capability, yet their treatment of the aircraft issue shows a failure to fundamentally understand the strengths of the capability:

Focusing on mission and strategy requirements, AFSOC FID planners advocated the procurement of airplanes ideally suited to the aviation-FID mission; however, these aircraft were rejected because they did not comport with the acceptable notion of a front-line weapon system. Consequently, the Mission Need Statement justifying “a family of Air Force, FID-specific aircraft” was rejected by USSOCOM in 1993 and no aircraft were programmed for what was ostensibly a “flying” special operations squadron. Adding insult to injury, 6 SOS designers were accused of attempting to create a “flying club,” owing to the “off-the-shelf” and “low-tech” nature of the airplanes requested. And yet every Commander-in-Chief of US Special Operations Command (USSOCOM) since 1990 and a succession of AFSOC commanders have validated the concept of aviation-FID as originally articulated, and reams of studies have demonstrated conclusively that simple, inexpensive, reliable, and “alternative technology” platforms are best suited for the aviation-FID mission.¹⁴³

Assuming Colonel Johnson’s observations are accurate (which is in line with observations highlighted with interviews of 6 SOS personnel), then the

¹⁴³ Wray Johnson. “Ends Versus Means: The 6th Special Operations Squadron and the Icarus Syndrome”. *Air and Space Power Chronicles*. 12 January 2000.

6th could provide the requisite knowledge base to help leaders bridge the gap between the perception of aviation FID as a powerful tool and the reality of its implementation.

b. Doctrinally Flexible Air Force

More so than the other services, the Air Force has relied on and ridden the back of technology as a mainstay of both progress and capabilities. Occasionally the service is lamented in its quest for technology regardless of whether the advance meets the needs of the present. The current arguments for and against the F-22 are typical of this debate, where the Air Force advocates that success tends to be a function of staying ahead of adversaries with the latest capabilities and technologies, and then chooses to remove from service the older asset for which the new was developed to replace (the F-15 in this case.) Whereas opponents may be willing to recognize the benefits of technological advances, but believe the costs of pursuing a pure advanced technological strategy conflicts with more appropriate ways in which to fight present conflicts.¹⁴⁴

To a greater degree, the Air Force seems very reticent to recognize the utility of modes of operation that are more than a platform-generation old. DoD strategist and war gamer James Dunnigan commented on how the United States Air Force might view Afghani acquisition of foreign made light/attack aircraft as the mainstay of their new air force:

These ‘trainer/light attack aircraft’ can also operate from crude airports, or even a stretch of highway. Aircraft like this can carry systems to defeat portable surface to air missiles. They can carry smart bombs as well. But from the U.S. Air Force point of view, there are several problems with these aircraft. First, none of these aircraft are made in the United States, so Congress will not be happy about U.S. tax dollars buying non-American warplanes. Second, the U.S. Air Force has no experience with these aircraft.

¹⁴⁴ To complete the example, opponents might argue that since conventional air-to-air battles appear to no longer be part of the spectrum of modern conflicts, no new air-to-air fighters are necessary, or a simple upgrade of the F-15 would be sufficient.

Finally, the air force doesn't want something like this to succeed in Afghanistan and raise questions about U.S. Air Force tactics and buying decisions.¹⁴⁵

In a 21st century vision statement for AFSOC, Lieutenant Colonel Dredla identified one of the four pillars of AFSOC as "must remain low-tech to deal with the majority of host nation air forces that are not on the same technological plane as the USAF."¹⁴⁶ Yet there remains a trend to ignore this type of advice; such as the decision the Air Force almost made to remove A-10's from service. "With the fall of the Berlin Wall in 1989 and the subsequent disintegration of the Soviet Union, however, the Soviet threat seemingly disappeared, and the US began to downsize its military forces. Among the Air Force's early contributions to this downsizing was the projected mothballing of its entire A-10 fleet."¹⁴⁷ Just as that process was gaining momentum, the A-10s were rushed to southwest Asia to meet the needs of Operation Desert Storm. "Effective against Iraqi tanks and other ground vehicles, these aircraft exceeded both the Air Force's and their designer's expectations.³⁰ In addition, the flexibility and ruggedness of the A-10 allowed it to perform a wide range of missions for which it was not designed--such as suppression of enemy air defenses, armed reconnaissance, and armed escort for search and rescue."¹⁴⁸ Had the Gulf War taken place only a year later, the Air Force would have had to recall these assets from a mothball status.

This vignette is indicative of contemporary Air Force thinking which eschews operational concepts and equipment thought of as antiquated. It is interesting to note that the A-10 is still in service, and has even gone through a SLEP (Service Life Extension Program) to extend its useful life. Had Desert Storm not shoved this point down the Air Force's throat, A-10s would now only

¹⁴⁵ James Dunnigan. "Why Afghanistan Still Hasn't Got an Air Force". Strategy Page. January 3, 2004.

¹⁴⁶ Michael J. Dredla. "Commando Vision 21 a Strategic Vision for Air Force Special Operations Command.". p. 38.

¹⁴⁷ Scott A. Fedorchak. "Close Air Support: Repeating the Past...Again?" Air Power Journal. Spring 1994. 11 April 2005.

¹⁴⁸ Scott A. Fedorchak. "Close Air Support: Repeating the Past...Again?" Air Power Journal. Spring 1994. 11 April 2005

be found in museums. Which raises the question as to what other missions and objectives the Air Force discounts “vintage solutions” in favor of technology driven approaches? With regards to CAS, the literature is fairly evenly mixed as to whether a modern asset (such as F-16s or F-35s) or an older airframe (A-10) is more appropriate for service in the U.S. Air Force. However, conventional wisdom is not so divisive where thought is given to what lesser developed nations should equip themselves with. Almost universally, subject matter experts, airpower theorists, and others familiar with the topic, believe that not only is a modern asset untenable for most of these nations, but they would be significantly less effective than a vintage platform.

The intent of this particular point is not to prove that a low tech solution is appropriate in this case, but that the mindset of the modern U.S. Air Force is prohibitive to even exploring such solutions. Herein once again lies the value of an organization such as the 6 SOS. The unique nature of the personnel employed there, and the missions they handle, creates a rich environment to ponder, explore and even witness the possible applications of simpler and cheaper approaches to solving vexing tactical problems, not routinely considered in the Air Force as a whole.

3. *Tactical*

Last is what has been labeled as tactical concerns. These obstacles do not necessarily refer to tactics as traditionally defined (maneuver on the battlefield), but rather that the units that execute FID missions are the ones that retain sufficient skills and resources to address these concerns. Paradoxically, some of these quandaries are obstacles traditionally addressed well above the tactical level (such as the acquisition of new aircraft) but the squadron/group/wing still remains the appropriately armed level at which to tackle these issues.

a. *Urban Shortfall*

Fixed wing aircraft, especially those of the “fighter” variety, have justifiably been critiqued for their shortfalls when it comes to conducting urban operations. Even for the US, such actions are very difficult to execute well; for a

third world nation the difficulty of the task can be exponentially higher. This does not mitigate other roles the same platform can provide (discussed previously). Additionally, many nations that America counts on to fight terrorism are predominately rural and have such large expanses of territory to cover, that no asset other than airpower is responsive enough to provide support in any kind of timely manner. Plus, in these types of nations the scenario is no longer predominately urban, thus the full capabilities of a suitable equipped CAS asset can be brought to bear. This situation is highlighted on the Pakistani-Afghan border. As of the spring 2004, when intelligence arrives to a Pakistani command and control facility of a probable border incident, Pakistani response team time frequently exceeds the length of the intelligence's value. Ground troops are essential in these situations, as many of the intelligence reports end up being innocents traversing the border region. A rotary-wing infiltration with a CAS asset could conceivably contribute much to the ability of the Pakistani government to successfully deal with its porous border.¹⁴⁹

As the "trainers", it is imperative that 6 SOS personnel embarking on the road to an AA-FID capability wisely study and learn the lessons of historical and modern applications of airpower, and develop tactics appropriate for their use. Just as the concept of firebombing an entire town is widely accepted as outdated, so might America be moving towards a time when even the collateral damage from a "smart munition" is considered unacceptable. Grasping the tenuous nature of these lessons is challenging, but even more so will be imparting the wisdom of those conclusions to the host nation. The "big kids with new toys" syndrome is a very real danger to be avoided, but one that comes back to previous discussions of ensuring the U.S. sees eye-to-eye with nations it partners with.¹⁵⁰

b. A Suitable Training Platform

¹⁴⁹ Lt Col Tariq Mahmoud, Pakistani Intel Officer. Personal Interview 3 February 2005.

¹⁵⁰ History is rife with examples of nations attempting to apply new technology or tactics in a whole variety of ways not appropriate for their use. Convincing nations that U.S. mistakes can be their gains will be an imperative objective and one that must be addressed at the strategic, operational, and tactical level.

This issue has been, and continues to be, a sticking point. “It is cost prohibitive to train in every aircraft listed in theater requirements. Therefore, while at home station advisors train in categories and types of aircraft generally representative of those operated by friendly foreign aviation forces The aim is to build transferable skills that can be relied upon for expeditions yet safe qualification in a variety of foreign platforms.”¹⁵¹ Johnson reflects on how even though the method for selecting initial rotary and fixed wing platforms for the 6 SOS followed conventional wisdom on this unconventional topic, peculiarities of the tasked proved to make the process problematic:

Some in fact averred that FID planners wished to return to the ‘good old days’ of a propeller-driven ‘junkyard air force.’ Regrettably, this myopic perspective played right into the hands of US Army officers at USSOCOM, who were convinced that the 6 SOS was a threat to Army special operations helicopter modernization programs—particularly efforts to upgrade the 160th Special Operations Aviation Regiment with the MH-47E and the MH-60K. When the senior US Air Force general officer on the USSOCOM staff accused AFSOC of pursuing a ‘flying club,’ efforts to acquire suitable aircraft for the 6 SOS shut down and aviation-FID planners were forced to seek ‘non-material’ alternatives (what one AFSOC planner termed ‘creative ventures’). The proximate cause of the ‘flying club’ accusation was the request for three unique aircraft for the aviation-FID initiative: the Basler Turbo (T)-67, the Pilatus ‘Porter’, and the Ayres ‘Vigilante.’

AFSOC FID planners advocated a ‘family of aircraft’ for the 6 SOS representative of those found in, and more importantly useful to Third World air forces. The candidate aircraft were examined according to very specific criteria. First, these aircraft should enable 6 SOS crews to develop and perfect the tactics, techniques, and procedures required to advise, train, and assist Third World air forces in the employment of their existing aviation assets. 6 SOS pilots and other crewmembers would necessarily have to be active flyers, current and qualified in ‘like’ systems. Without currency and proficiency, aviation-FID advisors would lack all-important credibility with the foreign commanders and crews they would be expected to advise and train. Moreover, 6 SOS maintenance personnel—aviation-FID advisors and trainers in their own right—would similarly require ‘hands-on’ experience with aircraft comparable to

¹⁵¹ Normal J. Brozenick, Jr. “Another Way to Fight: Combat Aviation Advisory Operations.” P. 21.

those found in the developing world. More importantly, few if any countries will seriously consider recommendations regarding off-the-shelf platforms if the US Air Force does not itself possess representative types of the very aircraft we are advising them to use. A perfect example of this reticency was reflected in the failure of the Northrop F-20 program, an aircraft which was designed from the ground up to be an export fighter. Not one country bought the F-20 for the simple reason that the US Air Force did not own and operate the airplane.⁶ SOS ownership of alternative technology platforms serves as a strong role model for air forces in the developing world. Moreover, ownership of such aircraft can contribute significantly to other USSOCOM missions, particularly covert and unconventional warfare operations.¹⁵²

In light of these types of issues and obstacles, since so much of the success of AA-FID operations rides on the professionalism and competency of the CAAs, it is imperative that an appropriate aircraft be acquired to serve as a AA-FID training platform. But there is no clear-cut solution to the present issue of what asset should be used for attack aviation FID personnel to maintain skill currency. Just because there is not a perfect answer, however, does not mean a partial solution cannot fit the bill for the 6 SOS to attain and remain capable, competent and ready to perform attack related FID missions. This author recommends that the 6th initially needs to acquire an affordable and representative airframe; time and experience will help determine which aircraft will be best suited for a “fighter” inventory.

An anonymous study named Project AFAC-Dragonfly, broached the issue of a suitable CAS platform for the United States. The author argues that given two spectrums of possible conflict for the U.S. (nation-state and campaigns against sub-national groups) no suitable asset remains in the inventory to effectively execute CAS and AFAC (Airborne Forward Air Controller) missions. Additionally, an appropriate asset may be found in considering older technology airframes with minor modern enhancements. “What we propose is that the AFAC needs of both sub-national and nation-state conflicts CAN be met if the aircraft has the aerodynamics that enables it to fly fast enough to penetrate IADs at high

¹⁵² Wray Johnson. “Whither Aviation Foreign Internal Defense.” Aerospace Power Journal. Spring 1997.

subsonic speeds yet can fly slower in the absence of the IAD threat to detect, locate, mark and kill/suppress fleeting sub-national group targets.”¹⁵³ Although the pursuit described in that work is not completely commensurate with this study, it ponders some of the same questions and thus provides some useful reference points.

The substance of the argument is that, given the constraints of those operations, an older technology airframe might be more appropriate for today’s missions. From Project Dragonfly, several key/relevant contents can be extracted that may be of assistance in addressing AA-FID issues. Those include:¹⁵⁴

- Aircraft characteristics:
 - Fast enough to survive surface to air munitions.
 - Slow enough to locate, mark and attack ground targets.
 - Carry sufficient ordnance.
 - Easy to operate.
 - Safe to operate.
 - Easy to maintain.
 - Durable/rugged.
 - Inexpensive.
 - Able to operate from unimproved surfaces.
 - Easily transportable.
 - Seat two.
 - Survivable.
 - Moderate service ceiling.
 - Short take-off and landing distance.
- Missions:
 - CAS
 - AFAC

¹⁵³ “Project AFAC – Dragonfly”. 20 January 2005. p 2-3.

¹⁵⁴ “Project AFAC – Dragonfly”. 20 January 2005. p 2-3.

- Rescue (land at a remote field and place the survivor in a vacant seat).
- Candidate aircraft:
 - A-4 SkyHawk
 - Thrush AY-65 Vigilante
 - OV-10 Bronco
 - OA-37 Dragonfly

Major Brian Downs noted that the “ideal CT/COIN aircraft for nations with limited resources should have a robust intelligence, surveillance, and reconnaissance (ISR) capability and be able to strike targets immediately when they are positively identified, and yet it must be inexpensive and simple to maintain and operate. The aircraft should have a long endurance for extended loiters, be able to operate in rugged terrain, and be difficult to detect.”¹⁵⁵ Having begun to outline the playing field of what characteristics the 6 SOS should seek in selecting a light-attack training platform, a review of the spectrum of features of aircraft currently in use around the world for attack aviation mission yields the following list:¹⁵⁶

- Inexpensive to procure
- Inexpensive to operate (maintenance and POL)
- Can be maintained in an austere environment
- Can operate from unimproved, short airstrips
- Wide range of operational speeds (at least as slow as 100 kts, and at least as fast as 200 Kts)
- Seats 2 (pilot and system operator)
- Widely represented in national inventories
- Can simulate a wide variety of munitions (air-to-ground)

¹⁵⁵ William Brian Downs. “Unconventional Airpower”. *Air & Space Power Journal*, Spring 2005. p 7.

¹⁵⁶ This list is a compilation of inputs from various individuals interviewed at the 6 SOS by the author, as well as the authors own experience and a review of the characteristics of the aircraft outlined in the 6 SOS’s MAT study. Potential characteristics also drawn from, Richard D. Newton. Reinventing the Wheel: Structuring Air Forces for Foreign Internal Defense. Aug 1991, p. 6. Sub bullets are specific items that the host nation would desire in an airframe, and thus the 6 SOS would want to train to.

- Free fall bombs
- Rockets
- Fixed forward firing guns
- Upgradeable or pre-existing sensor/communications suite
 - UHF
 - VHF
 - HF
 - Data link
 - NVG compatible
 - Targeting pod
- Good air-to-ground visibility
- Good loiter time (min 3 hours)
- Survivable
 - Armored
 - Twin engine
 - Unimproved landing surface capability

The issue of “airspeed” is an important one; aircraft that must operate at slow velocities are particularly vulnerable to surface to air munitions, whereas those that must operate at high velocities are unsuited for many of the roles discussed herein. Even the U.S. is subject to this same paradigm, such as F-16s which are highly capable and survivable, but due to qualities of their flight regime, have difficulty in executing roles that require continued and persistent coordination with detailed ground operations. Mr. Klingaman noted, “the mission of continuous, armed, low-altitude visual reconnaissance and surveillance of the guerrilla operating area is probably the most important application of air power in the limited-intensity warfare, and it is the one for which the U.S. Air Force is least prepared. It is a mission that high-speed fighters are incapable of performing, especially when it is combined with other mission options inherent in light armed surveillance aircraft.”¹⁵⁷

¹⁵⁷ Jerome W. Klingaman, "Light Aircraft Technology for Small Wars," in Dean, 123-38.

Some of the airframes that might be considered for this role include:

- Rockwell OV-10 Bronco
- Northrop T-38 Talon (F-5 Tiger II)
- T-37 Tweet (OA-37 Dragonfly)
- AT-802 Air Tractor, a.k.a, Thrush AY-65 Vigilante
- Sukhoi SU-25 Frogfoot
- Aero Vodochody L-39 Albatros
- Cessna O-1 Birddog
- Cessna O-2 Skymaster

The Rockwell OV-10 stands out as a strong candidate, but is not the sole contender. Acquisition of an initial airframe (possibly as a leased asset) will “get the squadron’s foot in the door”. From this position, the 6th can start the process of maintaining a small cadre of pilots, maintainers and support personnel with baseline skill sets in this role. Once a core competency and capability is attained, the 6th can “spin-up” teams in a target airframe, as required.¹⁵⁸ The greater diversity of attack platforms, fire control systems and munitions will make this a more challenging task for the squadron than a “normal” spin-up. To mitigate the associated risks and costs, the squadron should stick to a short list of nations/airframes they will assist with, until this operational capability is rehearsed and field tested. Eventually, experience and manpower will allow a slow and planned expansion to additional platforms and partners, possibly even allowing for more than one type of attack platform being maintained by the squadron.

c. Ensuring Compliance II

As mentioned above, ensuring host nations utilize assets and skills in a U.S. endorsed manner is also an issue of tactical concern. In each downrange operation the 6 SOS must ensure that only adequately trained and

¹⁵⁸ This is the manner in which helicopter and transport pilots prepare for a deployment. Although a crew may maintain their primary currency in a Lockheed C-130, if the host nation operates Russian built An-2 Colts, the team will begin to focus on this airframe at some predetermined time prior to the deployment. To include contracting access to a Colt so the pilots can develop proficiency in that asset.

professionally competent Combat Aviation Advisors are sent into the field. It falls to the role of these professionals to impart not just the physical skills and knowledge to utilize the equipment/training being offered, but also instill a sense of the greater importance of their new skill. Many third world nations operate with what the U.S. would consider to be antiquated values with regards to some issues, such as human rights. For instance, if a CAA team can convince their counterparts that collateral damage from a rocket attack in a busy market is tactically unwise because of potential local, insurgent and even international backlash, then that might be the final piece in pre-empting that type of operation. In other similar matters, CAA can serve to be an educational lynchpin that helps to ensure that behavior by the host nation is not only responsible but effective.

C. FINAL CONCLUSIONS

In the late 1980's and early 1990's there were a number of sponsored and independent studies that addressed the question of whether the U.S. Air Force, and Special Operations in particular, should stand-up an aviation Foreign Internal Defense squadron. Some of the more note-worthy of those studies include: Major Koster's *Foreign Internal Defense: Does Air Force Special Operations Have What it Takes*, Major Moulton's *Role of Air Force Special Operations in Foreign Internal Defense*, Major Newton's *Reinventing the Wheel: Structuring Air Forces for Foreign Internal Defense*, and Lieutenant Colonel Johnson's *Whither Aviation Foreign Internal Defense*. These studies were focused on determining whether aviation FID "made sense", and then once an aviation FID squadron had been formed, advocating that the 6 SOS could only accomplish its objectives satisfactorily if the squadron possessed organic assets, indigenous to the nations they worked with.

Both arguments were hotly debated and contested, but eventually accepted. The formation of the precursor to the 6 SOS (a two-man cell at HQ AFSOC, Plans and Programs) occurred in the spring 1991 with the 6 SOS coming fully on-line in April 1994.¹⁵⁹ The squadron acquired their first rotary-wing

¹⁵⁹ Wray Johnson. "Whither Aviation Foreign Internal Defense". Aerospace Power Journal. Spring 1997.

asset in 1996, and their first fixed wing plane soon thereafter later. Although the arguments of those studies were instrumental in acceptance of aviation FID as a concept, one of their recommendations has never been enacted. All four authors noted the importance (as well as the risks) of “fighter roles” as part of the FID process. Yet despite 1) Koster’s, “need for slow-flying, forward-firing aircraft [to perform CAS]”, 2) Newton’s “fire support is an important and viable mission for aerial forces conducting counterinsurgency operations” with the squadron possessing “light-attack aircraft”, 3) Moulton’s “Close air support and interdiction are undeniably important in security and neutralization”, and 4) Johnson’s “Since the mission was to assist foreign air forces with respect to the totality of airpower, the unit would comprise a diverse mix of specialties, including fighter, airlift ,and helicopter pilots”, the 6 SOS has never wholly progressed to executing the “fastmover FID” side of this equation.

Regardless of what theoretical or practical approach those four authors chose to tackle these issues, all came to similar conclusions; attack aviation FID has an important role as part of U.S. foreign policy, but it must be executed with exacting care and consideration. This study has approached the question from a quantitatively different and significantly broader view than any one of those authors, but with the same conclusion. By using Newton’s method of analyzing what doctrine and strategy directs SOF forces to accomplish, Moulton’s review of what airpower contributes to COIN/CT actions, and Koster’s and Johnson’s contrast of requirements versus assets, and now this authors addition of various forms of evidence that attack aviation skills are needed by American partner nations (all in the new context of the post September 11th environment) a clear statement of the situation and possible solutions emerges.

Inclusion of offensive skill sets for the Air Force’s first dedicated aviation Foreign Internal Defense squadron was a daunting concern for political and military leadership when the 6 SOS came to be. In the ten years since, Combat Aviation Advisors have shown themselves to be a professional organization, capable of tackling challenging scenarios in austere locations; results that have led to increased expansion and recognition of their potential contributions to

Combatant Commanders. In light of their developmental progress and prowess, and capabilities demanded by the global war on terrorism, this study suggests that it is now time to take the first fledgling steps towards the addition of “fighter skill sets” to the 6 SOS repertoire.

The first action requires that the 6 SOS must invest a minimal amount of time, money and manpower into building AA-FID professionals; hiring 1 aviator with fighter pilot experience, acquiring a “fighter type” platform, and the appropriate infrastructure/personnel to support both. From this “crawl” position, the squadron will be poised to transition to “walk” at some point in the future by providing elementary attack skill sets to capable and committed allies (of which the Philippines stands out as a prime example). As these proof of concept operations achieve their objectives, the squadron will be able to bolster the number of personal and equipment designated for this mission, and eventually reach the “run” stage wherein assistance can be provided to a greater breadth of nations in increasingly varied aircraft and missions. Due to the inherent risks of these missions though, “run” for fighter operations will probably never reach the levels of the helicopter and fixed-wing missions the 6 SOS currently embraces.

Throughout this process, other supporting mechanisms must be engaged to ensure the success, efficacy, and sensibility of fighter operations. Initially, FID educated commanders supplying quality FID information to military-political leaders will create new strategic and tactical opportunities for America. Then aviation FID experts at the squadron level can take baby-steps to implement this strategy at the tactical level. This combination of politically smart decisions executed professionally would fill a small but needed niche in this modern and turbulent world.

In the end, the Air Force will have invested a small amount of capital (fiscal and human) to build an off the shelf capability that has a direct and needed application in many places around the world. Just as CAS type roles have been a vital part of U.S. military operations throughout the years, they remain so for lesser developed allies. With U.S. assistance, those allies will be able to

prosecute counterinsurgent, and counterterrorist operations with the benefit of U.S. training and more importantly U.S. insight on the best way to strategically and tactically employ those elements. This “makes sense” strategy, if executed properly, can achieve gains disproportional to both U.S. and allied energy expenditures.

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APPENDIX

A. STANDARD AIR FORCE MISSION DEFINITIONS¹⁶⁰

Air Interdiction – Air operations conducted to destroy, neutralize or delay the enemy's military potential before it can be brought to bear effectively against friendly forces at such distance from friendly forces that detailed integration of each air mission with the fire and movement of friendly forces is not required.

Close Air Support – Air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces. Also called CAS.

Counter Air – A mission that integrates offensive and defensive operations to attain and maintain a desired degree of air superiority. Counter air missions are designed to destroy or negate enemy aircraft and missiles, both before and after launch.

Counter land – Operations conducted to attain and maintain a desired degree of superiority over surface operations by the destruction, disruption, delaying, diverting, or other neutralization of enemy forces. The main objectives of counterland operations are to dominate the surface environment and prevent the opponent from doing the same.

Escort – [Def 1.] a combatant unit(s) assigned to accompany and protect another force or convoy. [Def 2.] Aircraft assigned to protect other aircraft during a mission.

Foreign Internal Defense – Participation by civilian and military agencies of a government or other designated organization to free and protect its society from subversion, lawlessness and insurgency. Also called FID.

Forward Air Controller – An officer (aviator/pilot) member of the tactical air control party who, from a forward ground or airborne position, controls aircraft in close air support of ground troops. Also called FAC.

Forward Air Controller (Airborne) – A specifically trained and qualified aviation officer who exercises control from the air of aircraft engaged in close support of ground troops. The forward air controller (airborne) is normally an airborne extension of the tactical air control party. Also called FAC(A).

Internal Development – Actions taken by a nation to promote its growth by building viable institutions (political, military, economic, and social) that respond to the needs of its society.

¹⁶⁰ Unless otherwise noted, all definitions are from Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 12 Apr 2001, amended 9 May 2005.

Search and Rescue – The use of aircraft, surface craft (land and water), submarines, specialized rescue teams, and equipment to search for and rescue personnel in distress on land or at sea. Also called SAR.

B. POTENTIAL “FASTMOVER FID” TRAINING PLATFORMS¹⁶¹

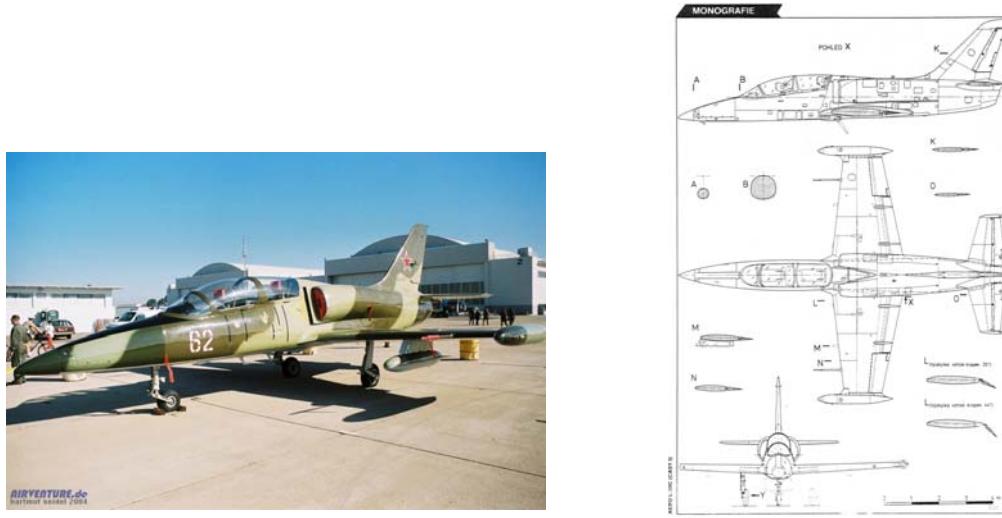


Figure 5. Aero Vodochody L-39 Albatros (Jane's)

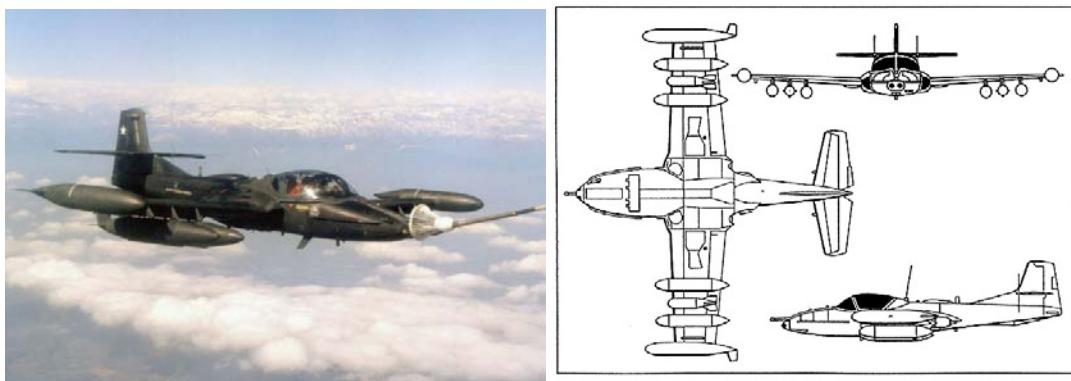


Figure 6. Cessna OA-37 Dragonfly. (Jane's)

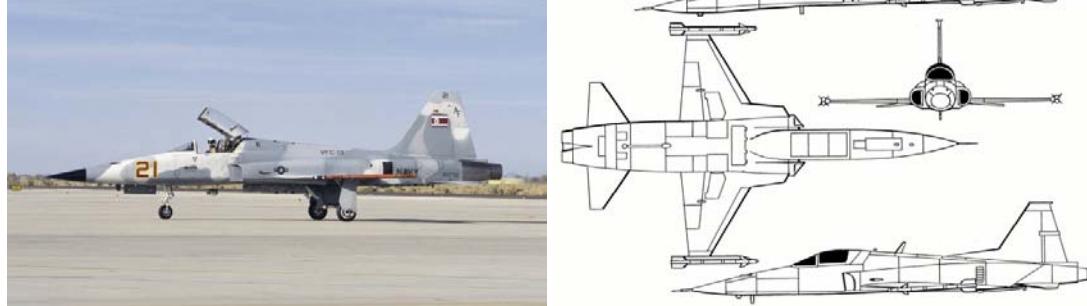


Figure 7. Northrop F-5 Tiger II (from Jane's)

¹⁶¹ All photos from “Jane's.” [Online Research](#).

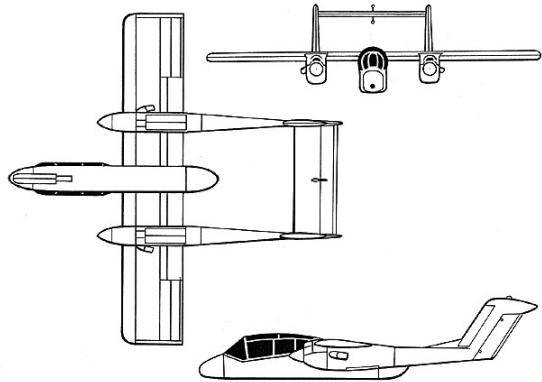


Figure 8. Rockwell OV-10 Bronco (Jane's)

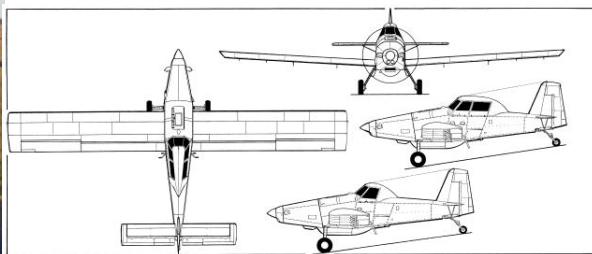


Figure 9. Air Tractor AT-802, Crop Duster Version (Jane's)

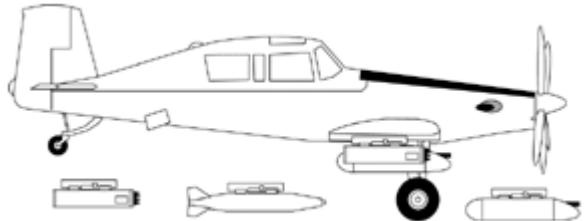


Figure 10. Thrush Vigilante, "Modified" AT-802 (Jane's)



Figure 11. Sukoi SU-25 Frogfoot (Jane's)



Figure 12. Cessna 0-1 Bird Dog (Jane's)



Figure 13. Cessna 0-2 Skymaster (Jane's)

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